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The OIL WEEKLY

Exclusively Devoted To The Production and Transportation of Oil and Gas

February 24, 1928 **Volume 48. No. 10**

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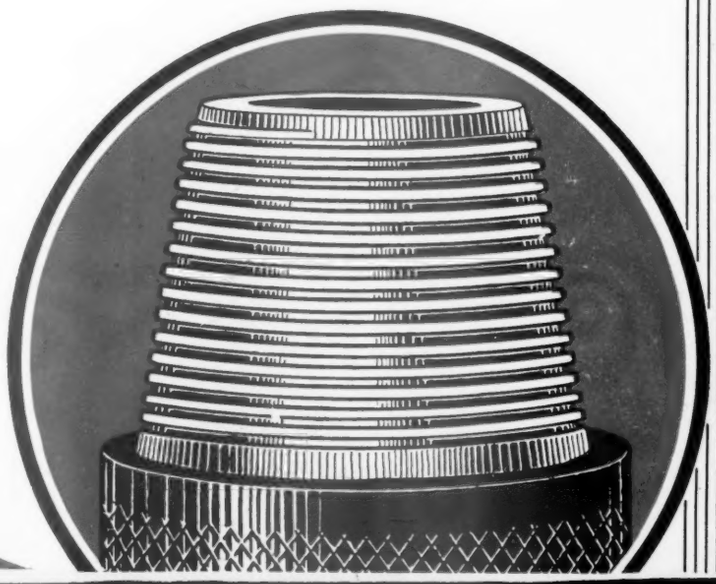
Longer Life

THE HUGHES TOOL JOINT

FEB 29 1928



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Carefree Operation

AFTER ALL, the demands that you make of your pumps are very simple. All that you ask is that in addition to doing their work properly, they operate year in and year out with a *minimum of care.*

In explaining how well GASOS meet this requirement, we need only make two statements—

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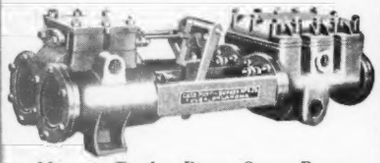
(2) Still another addition is being built to our plant.

Our catalog is a 64-page book of pump information. May we send you your copy?

STEAM-DRIVEN PUMPS

Correct in Design—
Long Lived—Dependable



No. 401—Duplex Piston Steam Pump (175 to 800 pounds pressure) A general service model, widely used in the handling of heavy oils. Like all Gaso models, it has *fewer* and *stronger* parts.

No 404—Gaso Duplex Piston Steam Pump for 500 to 800 pounds service. A high pressure pump, ideally suited for handling gasoline, acids, etc., under high pressure. Practically no gasket surface; *fewer* and *stronger* parts.

No. 407—Its ability to handle large capacities under high pressures has made this pump (600 to 800 pound) one of the most widely used of the Gaso line. Heavily constructed to withstand abuse. *Fewer* and *stronger* parts.

GASO PUMP & BURNER MFG. CO.
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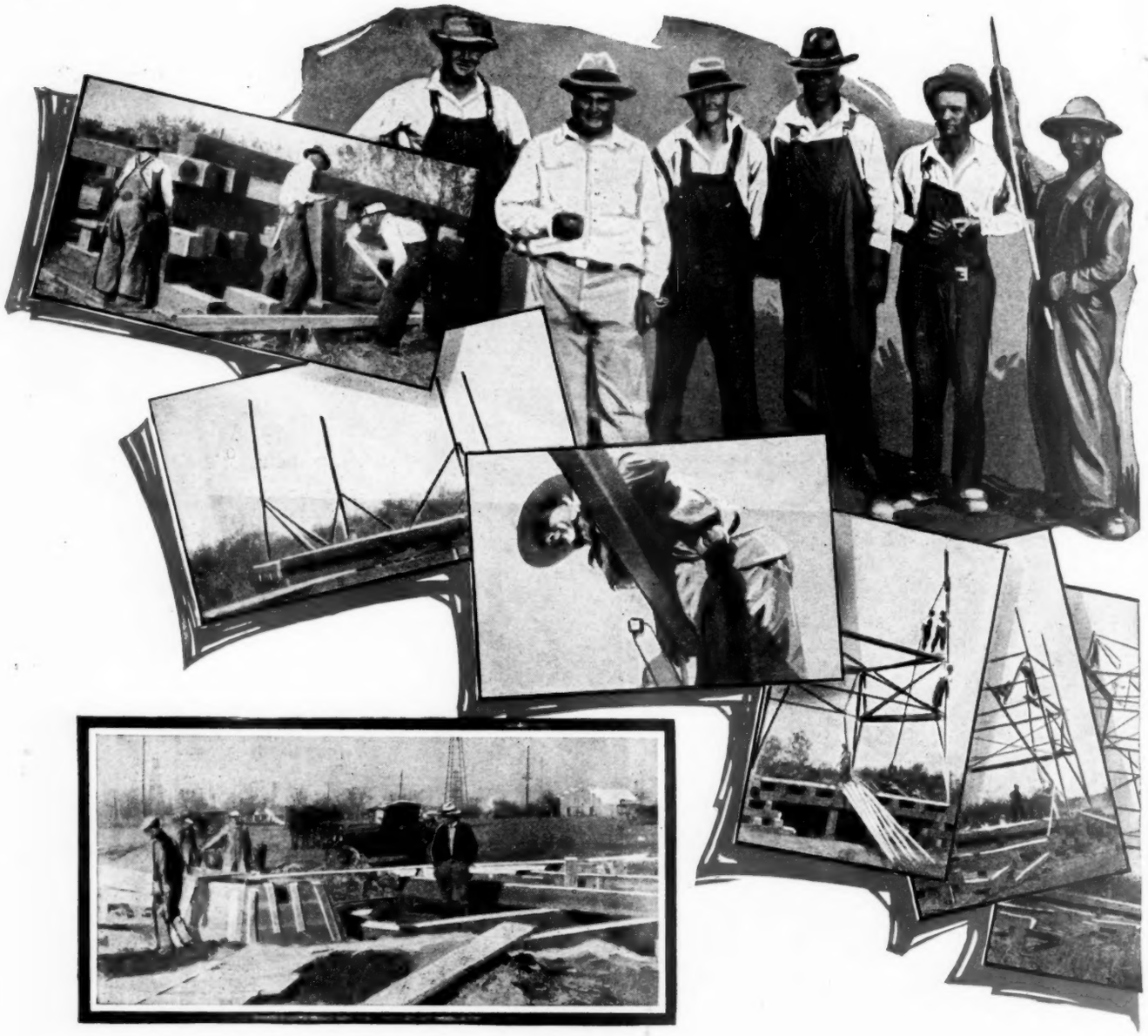
GASO PUMPS
for every oil industry need

These men know IDECO



Concrete piers, plus our IDECO Galvanized Structural Steel Bases and Machinery Supports effect an astonishing saving in the wear on operating machinery.

THE INTERNATIONAL

Say you saw it in The OIL WEEKLY

means quick easy erection

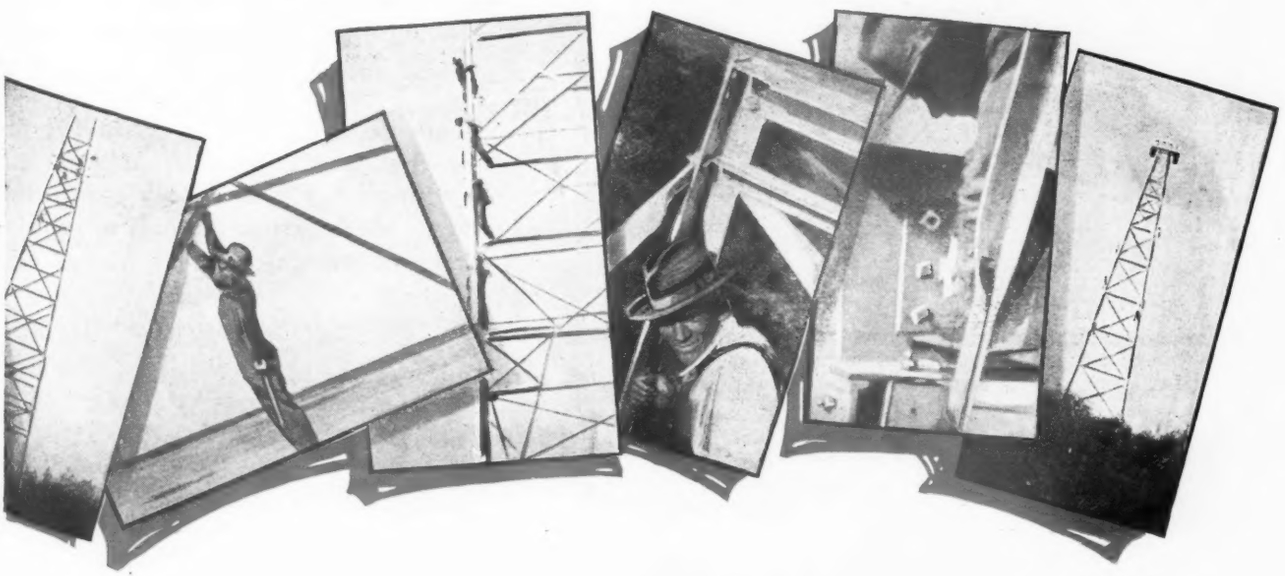
SWIFTLY, smoothly, steadily rises the IDECO Galvanized Structural Steel Derrick in the hands of any competent erection crew. The easy identification of each unit, the comparative lightness of members, the minimum of bolts—make possible the many records of speedy erection of which IDECO boasts.

30 to 60 Per Cent fewer parts than any other derrick on the market.

The International Derrick & Equipment Co.

Columbus, Ohio **Torrance, Cal.**

Branches in every important oil center.



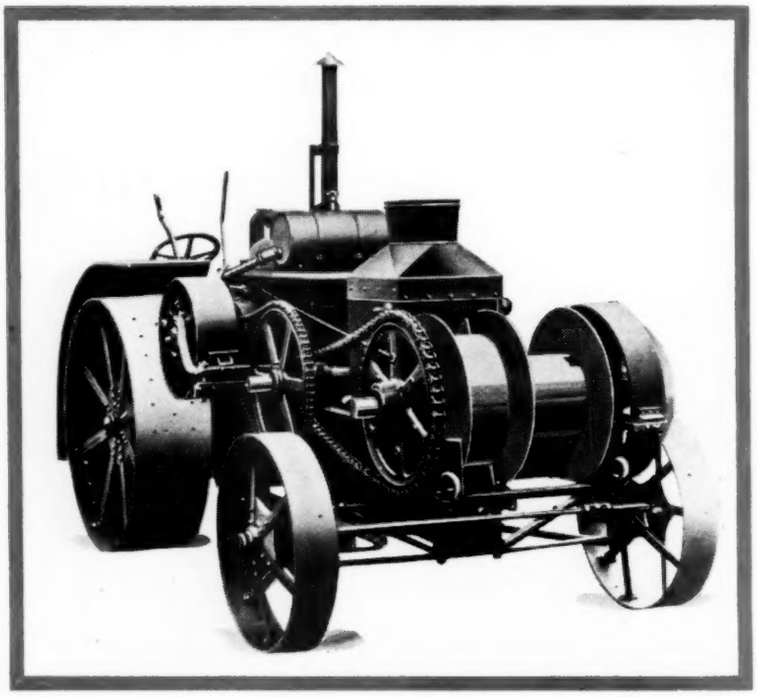
INTERNATIONAL STEEL IDECO DERRICKS (GALVANIZED)

DERRICK & EQUIPMENT CO.

Say you saw it in The OIL WEEKLY

RUMELY OILPULL TRACTOR LA PORTE IND.

An Organization With a Reputation of Nearly A Century Is Behind Every OilPull Winch Tractor and Stationary Engine



The **OilPull** Winch Tractor is built complete in the Advance-Rumely Factory at La Porte, Indiana. It is not an attachment, but a complete job built from the ground up for oil field work.

Since their inception 18 years ago, **OilPull** Tractors and Stationary engines built by Rumely, have had the reputation of economy, durability and dependable long life the world over.

Every Rumely **OilPull** Winch Tractor that has ever been sold is still working . . . this tells only part of the story of Advance-Rumely's reputation and service.

For further details write or call.

Fred E. Cooper

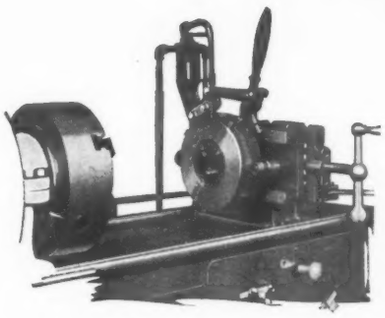
Special Representative and Developer of Oil Field Machinery

18 South Madison **Tulsa, Oklahoma**

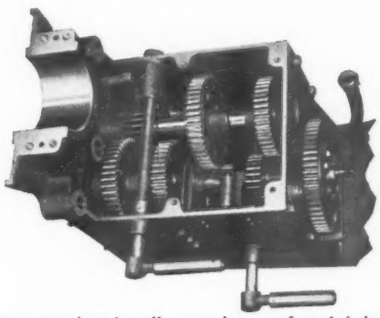
Phone 8904

OilPull Factory at La Porte, Indiana, where OilPull Winch Tractors are built.

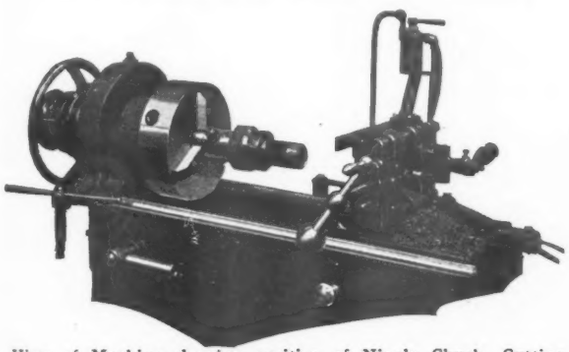
Say you saw it in The OIL WEEKLY



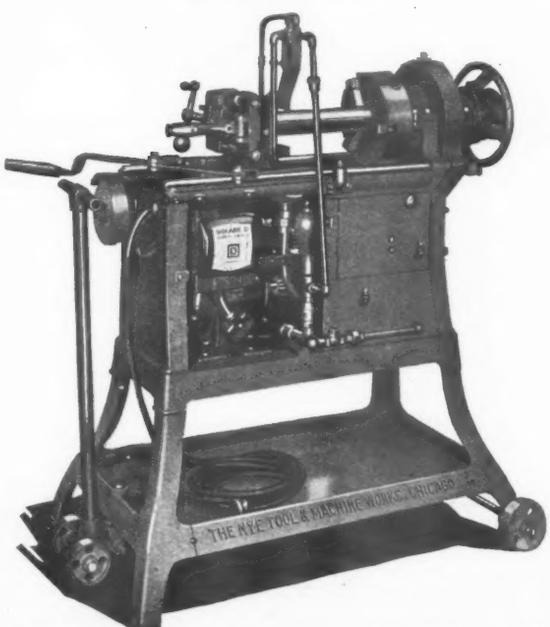
Quick Opening Die Head



Gear Case running in oil, assuring perfect lubrication



View of Machine showing position of Nipple Chuck, Cutting Off Tool and Reamer



CAPACITY: ¼ to 2 inches inclusive. With Universal Drive Shaft will operate stocks up to 12 inches
Note Grinding attachment—2600 R.P.M.

A Letter from Harry G. Nye

To the Oil Men of the U. S. A.

Fellow Citizens:

I know a man whose wife ran away with his best friend. In fact, that was what made him his best friend. He had never heard of the fellow before, but he always spoke kindly of him after that.

People are always doing us unintentional kindnesses. A taxi rammed me one time, and I missed a train that was wrecked. I would rather have my fender bent any day than my medulla oblongata. But I wanted to shoot the gent at the time.

When a fellow does you dirt, don't shoot him, brother. Give him time. He may be doing you a kindness. You may yet pick posies out of the dirt he did you. You never can tell.

I know an oilman who locked fenders with another oil man in traffic. The other oil man got sore and threw a Nye die at him and broke his pipe. (You know, there never yet was a pipe that a Nye die wouldn't go through).

He hadn't ever heard of Nye dies before—this oil man hadn't. Of course, every oil man has now; this was a long time ago. He took the die home for evidence in the case. When they got through with it in the court, he tried it in the shop.

Now he says that fellow was his best friend. My dog bit a neighbor, and now his wife doesn't speak to me any more. I tell you a dog is a noble animal. And no darned fool, at that. So let us love those who do us a kindness, whether they meant to, or not. If a man socks you with a Nye tool, he is your friend, not your enemy. Just say, "Now I remember what I was going to order!"

Nye Dies work faster than a big blonde at a party, easier than stepping on a banana, and lasts longer than the installments on a car.

Yours faithfully, and hopefully,

HARRY G. NYE.

Otherwise Known As

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Universal Shaft operating stocks up to 12 inches

THE NYE TOOL AND MACHINE WORKS

4120-30 Fullerton Avenue Chicago, Ill.

This New Screen Increased Production 33⅓%

"I have always been a great believer in Layne Screen, in fact each of our forty-one producing wells in this field are equipped with this screen. The wells that are now finished with the Layne & Bowler New Milled Screen have increased their production more than one-third over what they were doing with just the plain screen. Consequently, I am using this exclusively, and in my opinion no praise is too great for the Layne & Bowler Milled Screen."

The above paragraph is taken from an unsolicited letter from one of the biggest producing companies in Louisiana.

Many other companies are having similar success with the new Layne & Bowler Milled Screen.

The new Layne & Bowler Milled Groove Screen, as shown in the illustration above, has all the advantages of the old type screen plus a much enlarged inlet area without weakening the screen.

The Layne & Bowler Co.

THE LAYNE NEW YORK CO.
30 CHURCH ST. NEW YORK

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It's a Wilson

When

the Side-door is latched
it stays locked

until released by the Operator

Sudden jerks or jars, load-pulls or overloads have no effect upon the patented Spring-Latch of a Wilson Elevator. It positively will not unlatch. In fact, no Wilson Elevator has ever dropped its load, to our knowledge.

Wilson Speed Elevator

Carried in stock at your Supply Companies

Wilson Oil Tools Corp.

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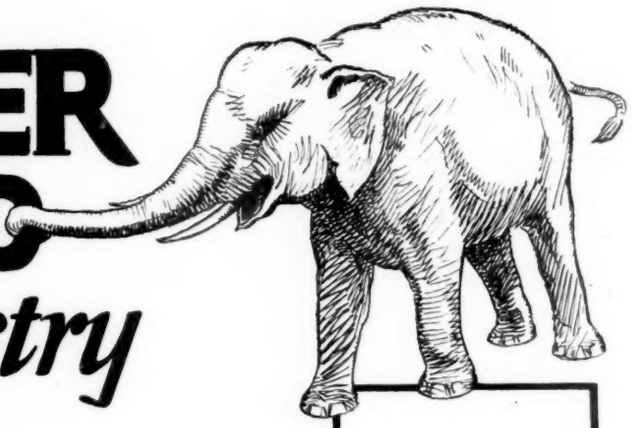
Say you saw it in The OIL WEEKLY

"GOODALL *semi-metallic*"

LONGER LIVED *Oil Industry Hose*



"GOODALL Semi-Metallic" Hose has won leadership in the Oil Industry because it is not only brutally strong and exceptionally flexible, but—like the elephant among animals—it is notably long-lived.

The G. S. M. inner tube of highest grade rubber resists wear from sand and other abrasives. The flexible, ball-joint armor withstands highest pumping pressures and defies outside wear and damage. Rotary and Special Manifold Hose are spot-welded every 30 inches, and armor is welded to coupling, insuring additional strength and safety.

G. S. M. is furnished in Rotary Hose, extra heavy Combination Rotary and Cementing Hose, Manifold Hose and Steam and Water Hose. Also special types.

G. S. M.
ROTARY HOSE

Demonstrates exceptional stamina in hard usage. Also furnished in extra heavy Combination Rotary and Cementing Hose.

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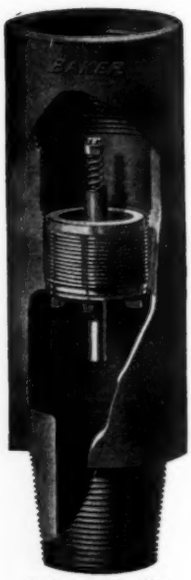
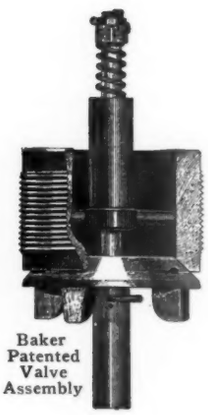
The

BAKER

DRILL PIPE FLOAT with the PATENTED VALVE ASSEMBLY



Baker Drill Pipe Float



Baker Patented Valve Assembly

Establishing a precedent for safety and economy, the Baker Drill Pipe Float has consistently proven to be an invaluable asset of efficiency in deep well drilling. In serving as a device for economy, it will greatly lengthen the life of the wire lines, brake bands and equipment while as a factor of safety, it often prevents serious accidents and delay due to parted drill pipe. The remarkable effectiveness of the drill pipe float is due to the operating ingenuity of the

Baker Patented Valve Assembly

The Baker Valve Assembly is our exclusive design and fully covered by patents. There is nothing in the valve cage for anything to hang up on, while the unobstructed and enlarged opening below affords free passage for the circulating fluid. The spring-pressed back-pressure valve will open easily to just the proper distance to allow the fluid to circulate freely. Should drill pipe become stuck, the operator can easily break out the valve assembly if such procedure is desirable. The Valve Assembly is readily accessible for inspection and can be conveniently replaced with a new valve as soon as it evidences signs of cutting out. Insist on and use only the Baker Valve Assembly for renewal—there is no substitute for Baker supremacy in valve assembly. Write for literature and full information.

Coalinga, Calif.

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Taft, Calif.

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BASCO

708 Keystone Bldg., Houston, Texas

Volume 48, No. 10 February 24, 1928

The OIL WEEKLY

Edited Weekly at Houston, Texas SPENCER W. ROBINSON, Editor

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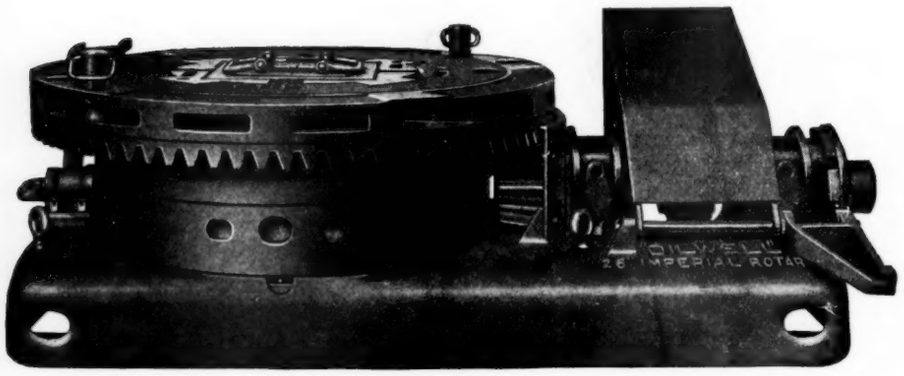
"OILWELL" Make-and-Break Rotaries

Drill pipe, tool joints and casing can be screwed up (as well as unscrewed) and better joints made with any "OILWELL" Make-and-Break Rotary than by any other method, and with no damage to the threads. The Rotary does it all.



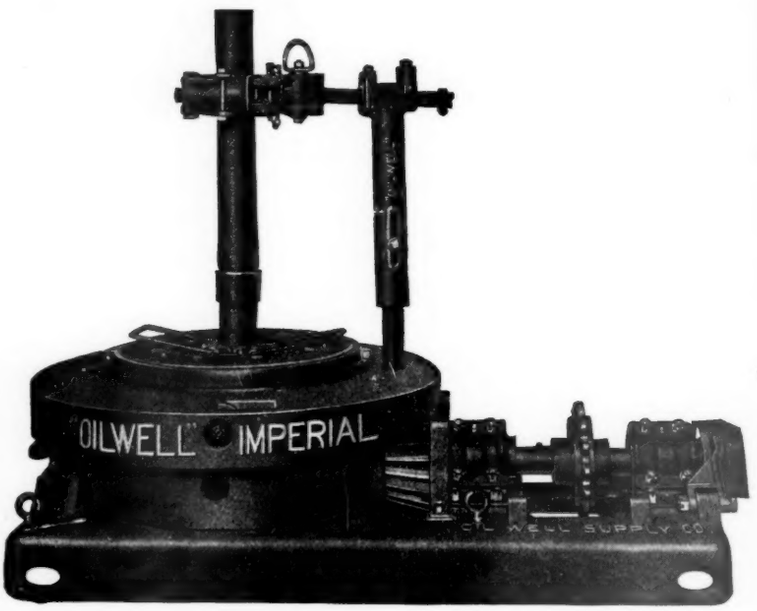
"OILWELL" 26-INCH IMPERIAL

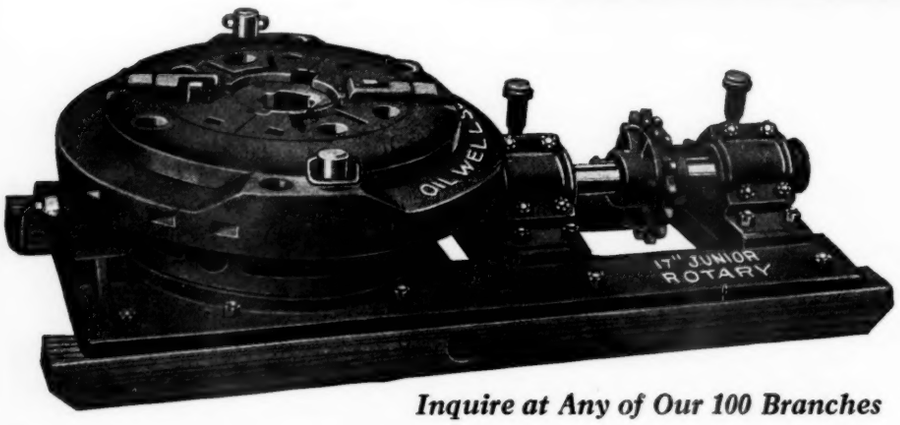
Constructed so as to permit a 30-inch fish tail bit to be lowered through or pulled out, and to handle, with slips, any size of pipe from 3-inch to 22-inch O.D.

"OILWELL" 20-INCH IMPERIAL

Constructed so as to permit a 20-inch fish tail bit or a 15½-inch rock bit to be lowered through or pulled out, and to handle, with slips, any size of pipe up to and including 12½-inch.

The 20-inch Imperial-California Type is of the same construction as the 20-inch Imperial except the slips, split spider and drill stem bushing. These parts are designed for the California fields or fields where 6-inch grief stems are used extensively. This rotary will handle, with slips, any size of pipe up to and including 12½-inch.





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WORLD'S OLDEST AND LARGEST MANUFACTURERS OF OIL FIELD EQUIPMENT

High Gravity Crude Increased in Price Adjustment

Heavier oils cut but most production in Mid-Continent area gets raised in general adjustment of prices

By KENT RIDLEY

Increases in Texas and California sent the production curve on the upward trend again last week, although a majority of the district into which American Petroleum Institute estimates are divided show losses. The increase, however, amounts to only 4800 barrels in the daily average. The principal increase was in West Texas, up 13,000 barrels, Winkler County being the chief actor. The Panhandle and North Texas were slightly down. California was up 3600 barrels.

Oklahoma declined 2650 barrels, the Gulf Coast 2600, and Eastern States 1500 barrels.

The slight rise recorded apparently is a repitition of performance of other weeks, and the downward trend which has continued since November is still in evidence. This tendency is calculated to be encouraged by price developments during the week, and particularly so should the talked-of shutting in of 75,000 barrels of California oil be accomplished.

Producers in California are planning to curtail principally heavy oil as a means of reducing the stocks of fuel which were added to materially in recent months while light stocks there were declining.

Price Adjustments

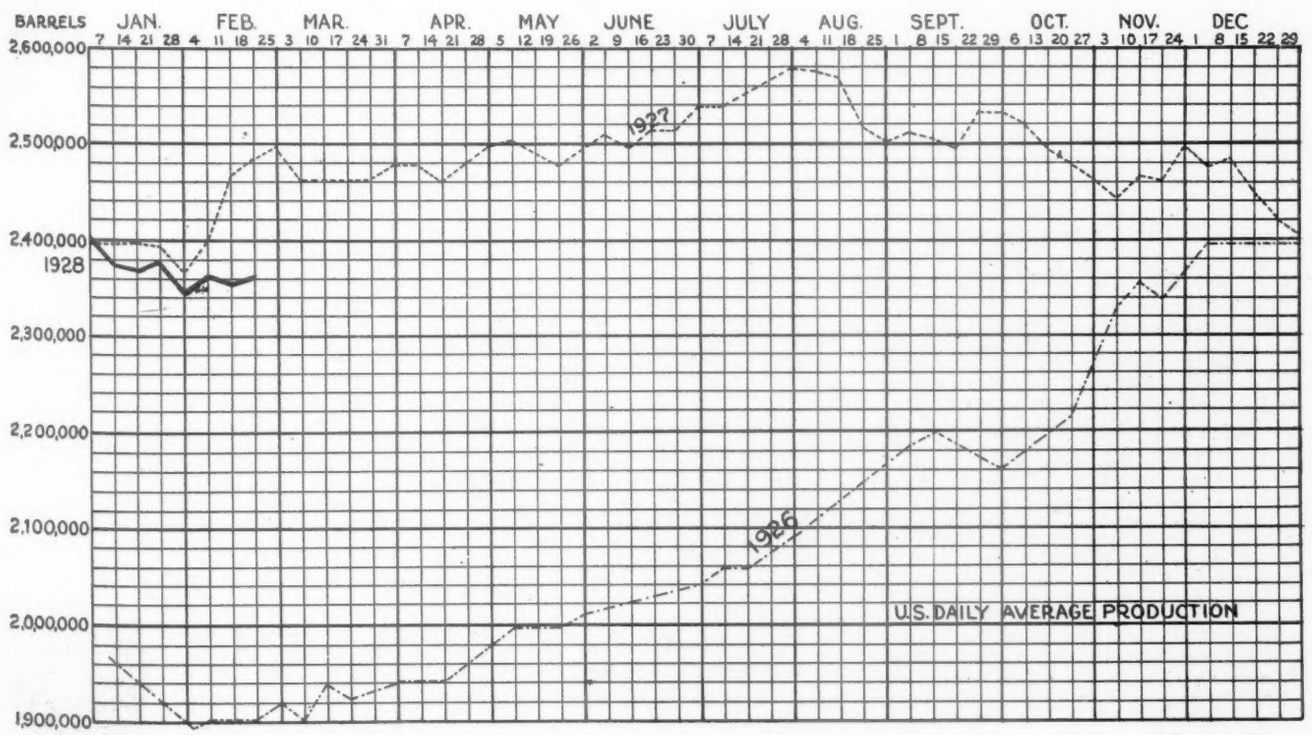
Over-supply of heavier grades and a non-active demand for fuel oil is reflected in changes made by a number of purchasers in the Mid - Continent area during the week. Details of these changes are to be found elsewhere in this issue, and it is to be noted that the heavier reductions are on low gravity oils, while in some instances, top grades were increased. Statement made by W. S. Farish, president of the Humble Oil & Refining Company, whose cut closely followed announcement of similar action by Carter Oil Company, another Standard of New Jersey subsidiary, is to the effect that the adjustments are in an attempt to more nearly reflect present prices on gasoline and fuel oil in the values placed on crude. Mr. Farish's statement says:

"In posting this schedule of crude prices applying to Mid-Continent grades of crude, we are attempting to interpret in terms of crude value the present market value of fuel oil and gasoline.

"In posting the new schedules for Panhandle crudes we have increased the posted price because we are no longer adding crude to storage in the Panhandle, nor are we shipping any of this crude by tank car."

The boost given Mid-Continent high gravity crude prices Tuesday morning is the first upward revision of prices enjoyed by the producers since April 15, 1926, and on this date the top grade was quoted at $3.57. The first break in prices that led to the long depression occurred

UNITED STATES CRUDE PRODUCTION TREND



Details of United States Production Estimates, Page 62

on November 1, 1926, but 15 days elapsed before all the major purchasers fell in line on this reduction. Other price cuts were made in rapid order early in 1927, reaching the low mark in April. However, Magnolia was an exception and made two other minor price cuts in April, and did not get back in line with other buyers' schedules until September 14, 1927.

The new gravity scale prices applied to the three separate sections of the Texas Panhandle by Humble, Gulf and Magnolia affords an increase ranging from 5 to 15 cents on the average grades, but the producers remain penalized on crude prices in this district as compared to price paid for similar gravity oil in the Mid-Continent proper. Gray County prices are 26 cents lower on each grade than Mid-Continent prices, and the Carson-Hutchinson district is 46 cents lower on each grade than Mid-Continent.

Low gravity crude was reduced in price in proportion to the increase given the higher grades, with below 36 gravity oils suffering the decrease. However, only a small percentage of the current Mid-Continent output is low gravity.

Comparatively low fuel oil prices, and a big surplus of low gravity oil in West Texas accounted for the reduction in the lower grades.

Contracts are being solicited by Prairie Oil & Gas Company from independent refiners in the Wichita Falls district to supply the latter with their entire crude requirements over a long period at 10 cents premium above the posted price and usual pipe line tariffs, as result of the Pure Oil Pipe Line Company of Texas (Prairie) purchase of the Wichita Pipe Line Company. The latter company has been supplying a number of plants in the Wichita Falls district with crude since its organization in February, 1924, and all physical properties and crude contracts were contracted for by the Prairie interests on February 13, for a cash consideration of $877,500. Prairie does not operate as a common carrier in Texas, and in order to engage in the crude marketing business with North Texas refiners, the newly acquired properties have been assigned to its subsidiary, the Pure Oil Pipe Line Company of Texas.

Several of the largest refineries in Wichita Falls have agreed to accept crude deliveries from Prairie, and negotiations are still pending with a number of other plants. This plan will have a tendency to hold down the size of premiums usually paid by independent refiners when market conditions are normal, and will also materially add to the crude market outlet enjoyed by Prairie Oil and Gas Company for its own production and the crude purchased from other producers.

Refinery operations in the North Texas district are at a low level, with only a half dozen plants in the Wichita Falls section running any appreciable amount of crude daily. Although some improvement has been registered within the past three weeks on gasoline prices, the refined market as a whole is not profitable even at present low crude prices. A number of plants are still shipping on U. S. motor grade of gasoline purchased late in January and early February by Gulf Refining Company. The latter product is now netting the refiners about six cents per gallon. Fuel oil quotations range from 72½ to 75 cents per barrel, with a slight improvement in demand lately.

New production developed lately by The Texas Company in the high gravity oil producing areas in Gray County section of the Texas Panhandle district has resulted in a deal being made with Prairie Pipe Line Company to transport this oil to Ringling, Oklahoma, where a connecting line will be provided by The Texas Pipe Line Company. The Texas Company is now extending its Gray County gathering system to connect with Prairie's tank farm at Kingsmill, Gray County. This plan will save Texas from entering the Panhandle with a trunk line system, although such was planned at the beginning of oil development in that district.

Another big gain in daily production registered last week by the Hendrick field sent the West Texas crude output to approximately 300,000 barrels. The Hendrick field averaged 118,160 barrels daily from 76 wells, or 1555 barrels daily per well, and tank car shipments are being pressed to near the maximum point to attain this level, while considerable oil is going into nearby field storage.

Landreth Production Corporation is reported to have contracted to deliver 500,000 barrels of Hendrick field crude to the Crystal Oil Refining Corporation's Cedar Grove, Louisiana, plant in tank cars at a flat price of 60 cents per barrel f. o. b. buyer's cars. Deliveries are to be started immediately at an average rate of 1500 barrels daily. Landreth has a six-inch line extending from the field to a rack at Monahans on the Texas & Pacific Railroad. Several major companies have posted a flat price of 60 cents per barrel for Hendrick field crude at the well, but are not buying any outside oil on this basis.

The entire structure of the oil market in California has been strengthened by plans to substantially curtail production. The plan calls for a reduction in fields producing heavy oils, although it is hoped that some sort of an agreement will be reached whereby veritable floods of crude will not be released even from the light oil districts. Stocks of heavy oil increased steadily during 1927 and continue to increase at a steady rate. If curtailment is brought to a point where additional heavy oil will not be stored, it is believed that the industry will recover in California at an earlier date than anticipated. Stocks of light oil decreased during the past year at a rapid rate. The heavy oil, which includes all grades of fuel oil, has been the chief disturbing factor in this State. Light oil stocks were reduced from about 31,000,000 barrels to 20,250,000 barrels during 1927, while heavy stocks jumped from 88,725,000 barrels to almost 93,000,000 barrels during the same period. By making inroads into the light oil stocks, a corresponding increase in heavy stocks occurred, due to the failure to dispose of fuel oil.

Neither Long Beach nor Seal Beach showed a decided change over the previous week. About 135 wells are drilling for the deep sand in the Long Beach field, but completions are still scarce. Setting several strings of casing requires much time, and coring through the great body of sand is a tedious task. The newly-discovered deep sand in the Seal Beach field is not giving a very good account of itself. When first discovered, the moral tone of the market was weakened. Two upper sands had played havoc with the situation, and the new one was equally feared for a few days. Three new wells have been started and their completion will give a better idea of the value of the formation.

The new fields of the state—Rincon, Edna and Fruitvale—are not expected to cause an upset. Of the three, Rincon probably will develop the largest production. The market is taking little heed of either area, although it is possible that any one may develop a good production. The discovery well at

(Continued on page 23)

CRUDE PRICE CHANGES

February 16.—Effective at the opening of the market today, Magnolia Petroleum Company posted changes in its price on low gravity Mid-Continent crude amounting to reductions ranging from 13 to 30 cents. Prices posted were as follows: Below 30 gravity, 75 cents; 30 to 30.9 gravity, 90 cents; 31 to 31.9 gravity, $1.05. On February 21, the price from 32 gravity to 52 and above was changed to conform to postings made by Humble Oil and Refining Company on the same date.

February 21.—Effective at the opening of the market today, Humble Oil and Refining Company posted changes in the price of North Texas and Panhandle crudes, effecting both the price and gravity of the oils included. The change amounted to a reduction of about 14 cents on the lower gravities of North Texas, but meant an increase of about 16 cents on the higher gravities.

The changes in the Panhandle resulted in increases on most of the oil, inasmuch as the Panhandle was put on the gravity basis, whereas before the change only Gray and Wheeler Counties had the gravity scale.

February 21.—Effective at the opening of the market today, the Standard Oil Company of Louisiana revised the crude schedule on Louisiana and Arkansas crudes posted on the gravity scale to conform to the posting made by Humble on North Texas. This change resulted in a reduction of 11 cents on the lowest gravity and an increase of 16 cents on the highest gravity.

The same bulletin announced a 15-cent reduction on all grades of Stephens crude.

February 21.—Effective at the opening of the market today, Carter Oil Company announced changes in Mid-Continent posted price ranging from 14-cent reduction on the lower gravities to 16-cent increases on the higher gravities of Mid-Continent crude.

Production Decline Continues During January

Downward tendency offers hope of ultimate market strength despite recent cuts which apparently are due to stock accumulation

By A. R. McTEE
Staff Representative

WITH a loss in daily average production of crude amounting to 80,650 barrels for January, the total yield of the United States was reduced 2,500,550 barrels. The output for the 31 days as compiled by the American Petroleum Institute was 73,516,500 barrels. For December the total gross production of all fields was 76,017,050 barrels.

This decrease for January with the slowly dropping trend in output thus far in February offers encouragement as far as the general situation is concerned. If the decrease continues throughout the next few months, undoubtedly strength should be manifest in the crude market. Considerable time will be required, however, for the industry to rise from under the burden of stocks of all oils totaling better than 584,000,000 barrels, even with decreasing production.

During January Kansas was the only state to show a gain in production as compared with December, and the Kansas increase amounted to only 66,650 barrels. All the other states showed declines as follows: Oklahoma, 1,402,750 barrels; Texas outside the Gulf Coast, 258,850 barrels; Gulf Coast, 404,550 barrels; California, 232,500 barrels; North Louisiana, 60,450 barrels; Rocky Mountains, 4,650 barrels; Eastern States, 51,150 barrels, and Arkansas, 151,900 barrels.

Decrease in Drilling

Field work showed decreases in proportion to the production loss. Completions were below the number reported in December by 654; completions were off 380, and there was a drop of 132 in gas wells. The number of failures in January was 128 more than in December.

These decreases in drilling were distributed generally over all the districts and are an indication of the trend field work is now holding. Of course in the highly active areas like Winkler and Pecos Counties, Texas, there is nothing resembling a shut-down. Judging from the amount of storage space either already built or now being projected throughout West Texas, that section need not suffer any appreciable slackening in drilling unless operators choose to limit their work. Heaviest decreases in drilling were reported in Oklahoma, Texas and California.

In the West Texas district, Pecos County showed the most activity, with 32 producers giving initial output of 233,100 barrels. Winkler County showed only nine wells and 49,585 barrels initial oil. Both Pecos and Winkler Counties materially increased their total production in January.

Drilling in Winkler County was given a temporary set-back on account of water trouble. However it is the general opinion of operators now that the water difficulty is of minor consequence, especially in relation to the ultimate output of the field. For the present, the situation can be handled with proper precaution in completing and drilling wells.

Throughout the Panhandle development was slow with only 21 completions for the entire district. Of this number 13 were producers and five gas wells. Total initial output from these included 8515 barrels of oil and 108,000,000 feet of gas.

Humble's recent change in its Panhandle postage increasing the price by posting on a gravity schedule will probably start drilling operations, especially on inside acreage.

North and Central West Texas showed less than the normal amount of work and most of the districts showed completion losses. Toward the close of the month there were scattering premiums being paid on North Texas crude but any stimulating influence these might have had on field work will be offset by more recent reductions in North Texas postings.

Coastal Wildcats

In the Texas and Louisiana Gulf Coast the major interest was in wildcat projects. On the Texas side, Humble Oil and Refining Company completed a producer good for 300 barrels initial production from a deep sand in Austin County. At this writing, however, the well has declined to less than half its original output. On the strength of the test Humble has started two other wells with the deep sand as the objective.

In Louisiana, discovery of the first commercial production east of the Mississippi river with added production from a few of the new domes nearer the Texas line, stood out as the principal achievement. The Sorrento dome well east of the Mississippi showed on the latest test nearly 6000 barrels of oil. Gravity of this oil is better than average Gulf Coast crude and the depth from which it is coming, 1670 feet, makes drilling there appear attractive. Due to the isolated location in swampy land, and the fact that the Gulf Refining Company controls all the surrounding acreage, the area will probably be drilled slowly. The well is about six miles east of the river in Ascension Parish.

Oklahoma

New oil produced in Oklahoma during January approximated only about 40 per cent of that obtained in December. The big decrease grows out of two factors—fewer wells were completed and the producers of this group registered smaller results.

Oklahoma fields' initial yield for January was 29,173 barrels against 72,016 barrels for the previous month. Completions in the state aggregated 233 for January as compared with 339 in December, and oil wells numbered 100 in January against 168 in December. Gas wells completed during the two months numbered 46 for January with 65 in December. This records a rapidly declining field activity, the major part of which is seen in Greater Seminole, where completed oil wells dropped form 82 to 28 over the period of a month with a resulting drop in new production from 55,356 barrels to 12,277 barrels. Thus Oklahoma's records still are largely shaped by the performance of Seminole fields.

Kansas field work showed a small loss, resulting in a small drop in initial oil during January. In January there were 81 wells completed, 29 of which

U. S. PRODUCTION

The following is the gross estimated production of crude oil in the United States for January, as compiled by the American Petroleum Institute. There is a slight difference in the totals herewith shown and those compiled showing individual field production, due to the fact that these figures are final, whereas the others are unrevised estimates.

Field—	Daily Average	Monthly Total
Oklahoma	675,450	20,938,950
Kansas	108,300	3,357,300
Texas (outside Gulf Coast)	523,300	16,222,950
Gulf Coast	125,450	3,888,950
North Louisiana	45,250	1,402,750
Arkansas	90,050	2,791,550
Eastern	109,600	3,397,600
Rocky Mountain	77,000	2,387,000
California	617,100	19,130,100
Totals	2,371,500	73,516,500

were oil producers having a combined initial output of 8405 barrels. This compares with 87 completions in December, including 41 oil wells with a combined initial output of 9065 barrels.

This year opens with almost as much decline in field operations in comparison to the opening of 1927 as January's decline compares with December's activity. Apparently 1928 will see less drilling than was done last year unless better crude prices offer a stimulus to field work.

California

California furnished its full quota of surprises and disappointments during January. One new field, a new sand in the Seal Beach field, several completions in the Rincon field and the scarcity of completions in the Long Beach field were the high spots of an interesting month.

The discovery of an entirely new sand in the Seal Beach field probably was the outstanding development of the month. The area, which held a virtual monopoly on the limelight during the greater part of 1927, had been rather roughly cast aside as out of the running. Both the Marland and Richfield encountered the new sand just below 6000 feet, and the latter succeeded in completing a well in the formation. Initial production was only 650 barrels, but about 200 feet of the sand was cemented off. The Marland interests did not succeed during the month in completing either of its wells which found the sand, but both hold much promise and should be completed early in February. The Marland wells found more than 500 feet of good oil sand. It is impossible to predict the ultimate effect of the discovery, but it is not believed that another orgy of townlot drilling will be precipitated in the immediate future. About 50 wells are in a position to continue to the deep sand. Only a large production in the Marland wells will warrant a general deepening program, however.

The discovery of a new field near Edna, in San Luis Obispo County, started the year with a bang. The field is located about one mile east of the old Tiber field, but is on a separate structure, since the discovery well started in a formation below that which produced in the Tiber field. The well was completed at 3155 with an initial production of 300 barrels. Pumping equipment was installed but used only to increase the flow. The oil is similar to that found in fields nearby. The leases were rather closely held before the completion of the discovery well. An intensive development campaign is not anticipated.

Long Beach failed to give any indication as to what may be expected of it. Completions were few and far between. Production actually decreased during the month. any wells were killed to deepen, and these were not offset by new production. The wells that were completed did not come up to expectations on the average. Mechanical trouble developed in several wells, while unsuccessful attempts at water shutoffs also affected several near-producers. With approximately 2000 feet of oil sand to penetrate, the successful completion of wells has required more time than anticipated.

The Rincon field shook off the water jinx during the month. Several wells were completed near the discovery well, but none had a large initial production. All wells were completed in the top of the sand, accounting for the rather small initial output. The oil sand is known to be several hundred feet thick, but the water problem in the discovery well was solved only after a decision was reached to produce only a few feet of the sand. Other operators made no attempt to include a large body of the sand. About 2000 barrels of new production was added during the month.

The Round Mountain field, which had been a puzzle since the first well was completed early last summer, came in for new interest during the latter part of the month. Two wells were completed, one a small, shallow producer and another an unusually good producer in the sand in which the discovery well was completed. Drilling was resumed on several wells in the field as a result of the new completions.

The area adjacent to Bakersfield attracted considerable attention, due to the discovery of a promising oil and gas sand in the Pacific Eastern's test near Fruitvale. The Union Avenue test, just east of the city, continued to drill through a series of broken oil sands.

With two large producers below 7000 feet, the Ventura field again demonstrated its potential possibilities. Both the Shell and Associated completed wells below the 7000 foot level during the month. It is the only field in the world having a worth while production at such a depth.

The Edison district failed to yield a strictly commercial producer, but developments indicated that the area will become an oil field. The General Petroleum's Kerwin 1 produced for more than a week at the rate of 100 barrels of oil and 50 barrels of water. The success of the well seemed to depend upon solving the water problem.

A demonstration of a semi-wildcat test just east of the Huntington Beach field offered some promise for a few days. The well failed on a production test, but its failure may have been caused by a faulty cementing job.

Activity in the Eastern district was about half that shown for December according to drilling statistics. Michigan was the only State of the group with more completions in January, and there the gain was only seven.

Mountain States were relatively inactive also, showing only 14 completions. Of this number 12 were producers, but initial production amounted to only 1967 barrels, emphasizing the small size of the wells.

PAST TWELVE MONTHS

The record for the past twelve months is an interesting study for comparison purposes, the following table giving field statistics for all states in the Union.

Month—	Completions	Producers	Gas Wells	Failures	Initial Prod.
January, 1927	1,989	1,257	192	540	315,948
February	1,965	1,215	225	525	284,016
March	1,881	1,190	175	516	321,119
May	1,777	1,060	166	551	400,022
June	1,726	1,049	178	499	359,380
July	2,036	1,219	238	579	486,489
August	1,642	982	207	453	439,735
September	1,870	1,092	228	551	380,851
October	1,541	870	225	446	322,603
November	1,651	901	205	545	367,657
December	1,857	1,020	311	256	522,536
January, 1928	1,203	640	179	384	396,150

UNITED STATES FIELD STATISTICS

Following are the completions showing producers, gas wells, failures, and initial production of crude by states, for the four weeks ending January 28, as compiled by The OIL WEEKLY:

Arkansas	25	7	4	14	230
California	45	36	..	9	26,130
Illinois	9	2	..	7	11
Indiana	7	4	..	3	108
Kansas	81	29	7	45	8,405
Kentucky	55	31	4	20	1,694
Louisiana	51	21	9	21	4,159
Michigan	10	6	..	4	228
Mt. States	14	12	1	1	1,967
New York	24	24	..	..	65
Ohio	96	37	37	22	575
Oklahoma	233	100	46	87	29,173
Pennsylvania	123	105	8	10	200
Tennessee	..	..	..	..	....
Texas	370	208	30	132	322,803
West Virgina	60	18	33	9	402
Totals	1,203	640	179	384	396,150
Last Month	1,857	1,020	311	256	522,536

M. R. Henderson, research engineer of the American Cable Company, has his headquarters temporarily in Houston; and is visiting the fields of the Gulf Coast, studying rotary drilling methods. He will remain in Houston for about two months. His permanent offices are in Tulsa and in New York City.

J. H. Greer, production superintendent for the Pure Oil Company in the Southwest division, headquarters at Tulsa, died at St. Johns Hospital in Tulsa, February 17, following an illness of three days. Death resulted from peritonitis, resulting from an acute attack of appendicitis. Mr. Greer was 51 years old at the time of his death, and had been engaged in the producing branch of the business since boyhood. He was born at Duke's Center, Pennsylvania, and attended school at Bradford. His first oil field work was with the old Pure Oil Company in Pennsylvania and later in the Casey, Illinois, field, in the lease business. He was connected with the National Supply Company at Cleveland, Oklahoma, in 1913. Later he went with the Producers Oil Company, and in 1916 joined the Humphreys Corporation in Texas. Following the purchase of this concern by Pure Oil Company he was transferred to Arkansas, and late in 1927 was made general superintendent of production with headquarters in Tulsa.

Provide Storage for Excess Crude in West Texas

Completed tankage on February 1 provided 30,635,000 barrels of storage, of which 17,249,000 barrels was filled; more building

By H. H. KING
Staff Representative

FORT WORTH, TEXAS.—Steel storage facilities are being provided in sufficient quantities in the West Texas district to afford a continuation of production increases over the next few months, and most of the new storage under construction is to take care of the large amount of crude produced in excess of pipe line and tank car shipments by the Hendrick field, Winkler County. A survey made February 18 credits the West Texas district with 30,635,000 barrels of storage facilities in large tanks completed and under construction, with two million barrels of additional storage being provided by the construction of two concrete underground reservoirs. Completed steel tankage amounts to 25,717,000 barrels, with approximately 17,249,000 barrels of crude contained therein on February 1.

The West Texas district has been the greatest market for steel tanks in the country during the past six months, and promises to occupy this position for some months to come, owing to the unrestricted development of the Hendrick field, which assumed the rank of being the largest individual producing field in the country last week with a daily average production of 118,160 barrels from 76 wells. The passing of flush production in the Hendrick field is expected to be followed shortly afterward by the lifting of production restrictions in the Yates field, and only a few of the companies operating in the latter field will be able to utilize tankage built in and near the Hendrick field when same is emptied.

Tankage in the West Texas district is now being filled at a rate varying from 70,000 to 90,000 barrels daily, while production averaged 299,855 barrels daily last week. Trunk lines operated by Humble, Gulf and Magnolia, local refineries and tank cars are affording outlet to market. Direct trunk line outlets being built by Shell Pipe Line Company (Roxana) and Illinois Pipe Line Company (Ohio Oil Company) will add about 50,000 barrels to the daily outlet.

The Landreth Production Corporation, Fort Worth, has accumulated the greatest amount of crude in the West Texas district, having approximately 2,510,000 barrels of Crane and Winkler crudes on hand at the close of January. Magnolia Petroleum Company ranks second with 1,711,500 barrels scattered among tank farms in Crane, Midland, Winkler, Howard and Mitchell Counties, and Magnolia is preparing to increase this quantity of crude stocks by erecting 20 new 80,000 barrel tanks at its Midland farm, which already has 17 completed 55,000 barrel tanks. Although Humble has 90,000 barrels daily pipe line capacity leading out of the West Texas district and 10,000 barrels local refinery capacity, its stocks have increased to 1,506,700 barrels, and 12 new 64,000 barrel steel tanks are being erected in the Hendrick field to supplement crude to be run via its eight-inch line just completed into the field. Humble's production in the Hendrick field averaged 16,230 barrels daily last week.

Atlantic Oil Producing Company, which is one of the largest producers in the Hendrick field, has built a steel tank farm at Midland that provides storage room for 1,235,000 barrels, and will increase same from time to time. Atlantic has a 10-inch pipe line from the Hendrick field to this farm, and 10,000 barrels daily is turned over to Magnolia Pipe Line Company at this point for delivery to the Gulf Coast. Magnolia's line has only 18,000 barrels daily capacity, and Atlantic has more than one-half of the present capacity under contract.

Prairie Oil & Gas Company is included in the group of companies that have large tank farms in West Texas, and at the close of January Prairie was credited with having 691,900 barrels in storage. Prairie erected three 55's on its properties in the Church & Fields area when pipe line runs were first prorated, and has since added 18 tanks of like capacity to a tank farm located a few miles to the northeast of the field in Upton County. Prairie is the second largest producer in the Church & Fields area, and is forced to store a large percentage of the oil produced, while Humble is running the balance for purchase.

Ward County has become an important crude storage center, owing to Hendrick field crude being transported to this county to make connection with the tank car racks on the Texas & Pacific Railroad. This county has 1,350,000 barrels of storage facilities completed, and 720,000 barrels under construction.

Crane County

Crane County is the largest crude storage center in the district, owing to Landreth, Simms-Atlantic, Eastland Oil Company & Collett-O'Keefe and Pecos Oil Company having stored a large amount of their flush production in the Church & Fields area during the last half of 1927. Limited pipe line facilities serving this field resulted in a proration order being issued in July, 1927, by the two pipe line companies buying outside oil, and proration has not been entirely lifted yet. Even though the Church & Fields area continues to decline in production, the owners of crude stocks in the district are not apt to receive a market for

WEST TEXAS STEEL TANKS

Large steel tankage completed, building and contracted for in 12 counties in West Texas aggregates 30,635,000 barrels gross capacity, of which 25,717,000 barrels are completed and 4,918,000 barrels are scheduled for completion in a few months. The tankage program is shown below by counties:

County—	Gross Capacity Completed Tanks	Capacity Tanks Building	Total Capacity
Crane	7,592,000	270,000	7,862,000
Crockett	55,000	.....	55,000
Howard	275,000	.....	275,000
Jones	55,000	.....	55,000
Midland	3,030,000	1,440,000	4,470,000
Mitchell	420,000	.....	420,000
Pecos	2783,000	.....	783,000
Reagan	3,550,000	.....	3,550,000
Upton	3,624,000	220,000	3,844,000
Val Verde	2,000,000	.....	2,000,000
Ward	1,350,000	720,000	2,070,000
Winkler	2,983,000	2,268,000	5,251,000
Totals	25,717,000	4,918,000	30,635,000

SURVEY OF WEST TEXAS TANKS AND LOCATIONS

A complete survey of all large steel tankage in use, under construction and constructed for in the West Texas district on February 18, 1928, is listed below by counties:

	Number Com- pleted Tanks	Number Tanks Bldg	Size In Bbls.	Location—Section, block and survey
CRANE COUNTY—				
Atlantic Oil Producing Co.	6	..	55,000	se¼ sec 46, blk 30, University Lands
Atlantic Oil Producing Co.	6	..	55,000	ne¼ sec 45, blk 30, University Lands
Atlantic Oil Producing Co.	2	..	74,000	ne¼ sec 45, blk 30, University Lands
Church-Fields-Weekly	2	..	55,000	e½ sw¼ sec 39, blk 30, University Lands
Church-Fields-Weekly	.	1	80,000	e½ sw¼ sec 39, blk 30, University Lands
Eastland Oil Co., et al	1	..	64,000	w½ nw¼ sec 47, blk 30, University Lands
Eastland Oil Co., et al	4	..	55,000	w½ nw¼ sec 47, blk 30, University Lands
Eastland Oil Co., et al	12	..	55,000	e½ e½ sec 44, blk 30, University Lands
Eastland Oil Co. et al	4	..	55,000	ne¼ sec 41, Louis Yarbrough sur
Gulf Pipe Line Co.	2	..	80,000	ne¼ sec 202, Blk "F", CCSDRGNG sur
Humble Pipe Line Co.	2	2	55,000	ne¼ sec 216, blk "F", CCSDRGNG sur
Humble Oil & Ref. Co.	6	..	55,000	nw¼ sec 36, blk 30, University Lands
Independent Oil & Gas	2	..	55,000	e½ nw¼ sec 46, blk 30, University Lands
Landreth Prod. Corp.	31	..	55,000	Strip Lease, sur 10, blk "J-C"
Landreth Prod. Corp.	12	..	80,000	ne¼ sec 8, blk "X", CCSDRGNG sur
Magnolia Pipe Line Co.	4	..	55,000	se¼ se¼ sec 44, blk 30, University Lands
Pecos Oil Company	1	1	80,000	sw¼ sec 47, blk 30, University Lands
Pecos Oil Company	6	..	55,000	sw¼ sec 47, blk 30, University Lands
Pecos Oil Company	1	..	37,500	sw¼ sec 47, blk 30, University Lands
Prairie Oil & Gas Co.	3	..	55,000	ne¼ sec 47, blk 30, University Lands
Simms Oil Company	16	..	55,000	ne¼ sec 45, blk 30, University Lands
Simms Oil Company	6	..	55,000	se¼ sec 46, blk 30, University Lands
Southern Pipe Line Co.	1	..	55,000	ne¼ sec 41, Louis Yarbrough sur
The Texas Company	1	..	37,500	w¼ sec 22, blk 35, H&TC Ry sur
CROCKETT COUNTY—				
Humble Pipe Line Co.	1	..	55,000	s½ sec 2, blk "BB", N. A. Miller sur
HOWARD COUNTY—				
Magnolia Petroleum Co.	5	..	55,000	sw¼ sec 12, blk 30, T&P Ry sur T-1-S
JONES COUNTY—				
Phillips Petroleum Co.	1	..	55,000	nw¼ sec 19, blk 19, T&P Ry sur
MIDLAND COUNTY—				
Atlantic Oil Prod Co.	12	..	80,000	n½ sec 40, blk 38, T&P Ry sur T-1-S
Atlantic Oil Producing Co.	5	..	55,000	n½ sec 40, blk 38, T&P Ry sur T-1-S
Gulf Pipe Line Co.	6	..	80,000	s½ sec 41, blk 38, T&P Ry sur, T-1-S
Gulf Pipe Line Co.	4	..	55,000	s½ sec 41, blk 38, T&P Ry sur, T-1-S
Magnolia Petroleum Co.	17	..	55,000	sec 43, blk 38, T&P Ry sur, T-1-S
Magnolia Petroleum Co.	2	18	80,000	sec 43, blk 38, T&P Ry sur, T-1-S
MITCHELL COUNTY—				
Coltex Refining Co.	1	..	55,000	s½ sec 42, blk 26, T&P Ry sur
Coltex Refining Co.	1	..	35,000	s½ sec 42, blk 26, T&P Ry sur
Coltex Refining Co.	3	..	15,000	ne¼ sec 21, blk 28, T&P Ry sur T-1-N
Magnolia Petroleum Co.	6	..	55,000	w½ sec 47, blk 29, T&P Ry sur T-1-N
PECOS COUNTY—				
The California Co.	1	..	55,000	sec 34, blk 194, GC&SF Ry sur
Humble Pipe Line Co.	2	..	64,000	e½ sec 58, blk 1, J&G Ry sur
Humble Oil & Ref. Co.	1	..	55,000	sec 36, blk 194, GC&SF Ry sur
Illinois Pipe Line Co.	2	..	55,000	e½ sec 61, blk 1, I&GN Ry sur
Illinois Pipe Line Co.	2	..	55,000	e½ sec 62, blk 1, I&GN Ry sur
Roxana Petroleum Corp.	2	..	80,000	n end sec 61, blk 194, GC&SF Ry sur
Simms Oil Company	3	..	55,000	sec 103, TC Ry sur
REAGAN COUNTY—				
Big Lake Oil Company	12	..	55,000	sec 11, blk 2, University Lands
Humble Pipe Line Company	10	..	66,000	se¼ sec 11, blk 11, University Lands
Humble Pipe Line Co.	5	..	64,000	se¼ sec 11, blk 11, University Lands
Humble Pipe Line Co.	2	..	67,500	se¼ sec 11, blk 11, University Lands
Reagan County Pur. Co.	16	..	80,000	se¼ sec 11, blk 11, University Lands
Texon Oil & Land Co.	9	..	55,000	secs 35 and 36, blk 9, University Lands
UPTON COUNTY—				
Gulf Pipe Line Co.	2	..	80,000	ne¼ sec 2, GC&SF Ry sur
Humble Pipe Line Co.	17	..	55,000	n¼ sec 65, blk 35, H&TC Ry sur
Marland Pipe Line Co.	6	..	80,000	e¼ sec 64, blk 35, H&TC Ry sur
Marland Pipe Line Co.	4	..	55,000	e¼ sec 64, blk 35, H&TC Ry sur
Mid-Kansas O&G Co.	1	..	55,000	nw¼ sec 19, blk 1, MK&T Ry sur
Mid-Kansas O&G Co.	1	..	55,000	ne¼ sec 34, blk 1, MK&T Ry sur
Prairie Oil & Gas Co.	14	4	55,000	ne¼ sec 34, blk 1, MK&T Ry sur
Roxana Petroleum Corp.	8	..	80,000	sec 31, blk 42, T&P Ry sur, T-5-s
Southern Pipe Line Co.	2	..	55,000	sec 7, GC&SF Ry sur
Texas Pipe Line Co.	1	..	64,000	nw¼ sec 64, blk 35, H&TC Ry sur
T&P Coal & Oil Co.	1	..	80,000	w¼ sec 66, blk 35, H&TC Ry sur
T&P Coal & Oil Co.	1	..	55,000	sec 5, GC&SF Ry sur
VAL VERDE COUNTY—				
Mid-Kansas O&G Co.	25	..	80,000	sec 9, blk B-3, I&GN Ry sur
WARD COUNTY—				
American Petroleum Co.	10	..	55,000	w½ se¼ sec 81, blk "A", GMMB&A sur
Independent Oil & Gas Co.	2	..	55,000	se¼ sw¼ sec 60, blk "F", GMMB&A sur
Landreth Prod. Corp.	1	4	80,000	s½ se¼ sec 80, blk "A", GMMB&A sur
Southern Pipe Line Co.	4	3	80,000	sec 20, blk "F", GMMB&A sur
Southern Pipe Line Co.	3	..	55,000	sec 20, blk "F" GMMB&A sur
Southern Pipe Line Co.	1	..	25,000	sec 20, blk "F" GMMB&A sur
Southern Pipe Line Co.	1	..	20,000	sec 20, blk "F" GMMB&A sur
Texon Oil & Land Co.	1	2	80,000	s½ se¼ sec 100, blk "F", GMMB&A sur
WINKLER COUNTY—				
American Petroleum Co.	2	..	10,000	se¼ sec 35, blk B-5, P. S. L. sur
Atlantic Oil Prod. Co.	5	..	80,000	ne¼ se¼ sec 31, blk B-5, P. S. L. sur
Gulf Production Co.	8	12	80,000	nw¼ sec 34, blk B-5, P. S. L. sur
Humble Oil & Ref. Co.	2	12	64,000	sec 8, blk B-12, P. S. L. sur
Independent Oil & Gas Co.	2	..	55,000	e½ nw¼ sec 41, blk B-5, P. S. L. sur
Independent Oil & Gas Co.	2	..	55,000	w½ sw¼ sec 34, blk B-5, P. S. L. sur
Landreth Production Corp.	3	..	80,000	sw¼ sec 29, blk B-5, P. S. L. sur
Magnolia Pet. Co.	1	..	80,000	w½ ne¼ sec 29, blk B-5, P. S. L. sur
Magnolia Pet. Co.	7	..	55,000	n½ sec 6, blk B-11, P. S. L. sur
Joe Maxwell & Turman	1	..	55,000	e½ ne¼ sec 29, blk B-5, P. S. L. sur
Joe Maxwell & Turman	1	3	80,000	e½ ne¼ sec 29, blk B-5, P. S. L. sur
Pure Oil Company	2	4	55,000	se¼ sec 34, blk B-5, P. S. L. sur
Roxana Pet. Corp.	3	..	80,000	n½ sw¼ sec 40, blk B-5, P. S. L. sur
Southern Pipe Line Co.	3	..	55,000	n½ ne¼ sec 6, blk B-12, P. S. L. sur
Southern Pipe Line Co.	.	1	80,000	n½ ne¼ sec 6, blk B-12, P. S. L. sur
Texon Oil & Land Co.	3	..	80,000	sw¼ ne¼ sec 7, blk B-12, P. S. L. sur

their oil for some time in the future, although Landreth has contracted to deliver 7500 barrels daily from this field to Magnolia over the balance of this year, with privilege of withdrawing from stocks to make full deliveries.

Gulf Production Company is the largest builder of steel tankage in Winkler County, having completed eight 80,000 barrel tanks, and at work on 12 more of similar capacity. Gulf is not ready to extend its West Texas trunk line system over to this field, owing to it being filled at present with crude produced in Crane, Upton, Crockett and Pecos Counties.

Roxana Petroleum Corporation is working day and night shifts in order to hurry the completion of its 1,000,000 barrel concrete underground reservoir, located in the east one-half of the northwest one-quarter of section 50, block "N," GMMB&A survey, Ward County, near Monahans. After this tank is completed a duplicate will be built near Roxana's tank farm in the McCamey district, Upton County. Other companies are considering this type of storage in West Texas.

A temporary shutdown agreement made a few weeks ago by operators in Howard County to shut in all wells completed from the 2900-foot lime pay after flowing same open for 24 hours has postponed a tank building program in that area. However, this area has been proven for flush production with four wells, and will later provide a good demand for large tanks.

Crude Stocks

Crude stocks in the West Texas district at the close of January, 1928, are listed below by companies:

Company—	Barrels
Landreth Production Corporation	2,510,000
Magnolia Petroleum Company	1,711,500
Atlantic Oil Prod. Company	1,581,500
Humble Oil & Refining Company	1,506,700
Illinois Pipe Line Company	1,362,950
Simms Oil Company	1,200,000
Kay County Gas Company (Marland)	1,081,650
Gulf Production Company	1,061,500
Eastland Oil Company et al	950,000
Southern Pipe Line Company	757,200
Prairie Oil & Gas Company	691,900
Big Lake Oil Company	626,650
Pecos Oil Company	597,650
American Petroleum Company	512,350
Independent Oil & Gas Company	343,800
Roxana Petroleum Corporation	254,050
Church-Fields-Weekly	137,300
Texon Oil & Land Company	115,250
Pure Oil Company	71,200
T. & P. Coal & Oil Company	65,700
Joe Maxwell & Turman	51,900
Col-Tex Refining Company	35,000
The Texas Company	23,450
Total	17,249,200

Sampling and Coring in Prospecting for Oil and Gas

By W. F. CLOUD,
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MODERN methods of oil field prospecting and development involve an intensive study and interpretation of formation samples and cores brought to the surface during the drilling process.

Correct examination of formation samples involves not only identification of the fluid content of the strata, indicating in a qualitative and quantitive way their possible value for oil production, but also involves determination of their lithological properties; such as percentage of pore space, percentage of saturation, and permeability, in order that some prediction can be made as to the future production characteristics of the sand, as well as portray some idea of the possible production obtainable. Careful examination will also help predict what operating methods may be best adaptable to local underground conditions within the oil "sand."

Samples of underground formations are secured from three sources: (1) By using the diamond drill, which is usually used when prospecting for favorable structure in areas where no outcrops are available; (2) by collecting bit cuttings from a cable-tool or rotary drilling well; and (3) by the use of various coring devices, or core barrels which are available for either cable-tool or rotary drilling.

Core Drilling for Structure

In portable petroliferous areas where the surface outcrops are poorly defined or absent entirely, as is the case in much of Western Oklahoma and Kansas, as well as in many parts of North and West Texas, the diamond core drill has been used with much success within the last few years. This method of sampling is popularly known as "core drilling for structure."

Most of the diamond drills used for "structure testing" are manufactured by the Sullivan and Longyear Companies, and are constructed to drill to depths ranging from 900 to 1000 feet. However, most of the prospect holes in Oklahoma and Kansas have not exceeded 600 feet; and in many cases the desired information as to possible existence of a structure is secured at depths as shallow as 300 to 500 feet.

The equipment is fitted with a two-inch core barrel assembly, and 600 to 1000 feet of small drill stem or rods, which are cut and threaded in five or ten-foot lengths. Fish-tail bits are used when drilling in soft formations; but hollow, circular steel bits set with four to eight black diamonds are used in hard strata. The latter type of bit cuts a continuous core, which is pushed up into the core barrel attachment, and held there by a self-locking core-lifter. A small double-action or duplex reciprocating pressure pump is used to circulate water down the inside of the drill pipe to keep the bit cool, flush out the cuttings, and prevent the walls of the bore hole from caving.

The diamond drill secures longer and less contaminated cores than any other coring device in use at the present time. This is due to several reasons: The diamonds are harder and tougher than the best quality of steel used in core "heads" or cutters; and therefore, cut easier and more smoothly. Also, the hydraulic cylinder feeding device maintains a uniform pressure on the bit at all times, thus preventing the drilling string from "plunging." And it can easily be regulated for best speed and accuracy in either hard or soft rock. The hydraulic control thus eliminates the sudden jars and shocks common to rotary coring, resulting in longer unbroken cores. Another reason why the diamond drill secures more satisfactory cores is attributed to the design of the core barrel. It consists of two walls. The out wall is screwed to the drill rods, and rotates at the same speed. The inner wall or "barrel" which receives the core, is suspended on ball bearings and remains stationary, thus protecting the core from frictional heat, the washing action of the circulated water, and the vibration and whipping action of the drill rods.

When a stratum is encountered that is easily distinguished from the others, it is usually chosen as a key-bed or horizon marker. Its depth, together with the elevation and location of the bore hole, is recorded. Then the drill is moved possibly a mile away, usually to another corner of the same section of land, where the same key-bed is sought again. At least three or four, and as many as seven or eight tests are often made in order to ascertain the dip and strike of the strata, and the amount and nature of folding that may exist. Ten to 12 tests will usually define the limits of most anticlines or domes.

The cores secured should be placed in metal or wooden trays, so constructed that the cores will fit into them, and be kept in their proper stratigraphic relationship. Each section of core should be carefully marked in sequence, so as to preserve the data for future study.

Sampling at a Cable Tool Well

More satisfactory samples can be obtained from wells drilled with cable tools than is the case where rotary tools are used. This is true because there is usually less open hole, which precludes caving, the tools are pulled out more often, and the cuttings cannot be scattered and contaminated by the mud-circulating system, as is the case in rotary drilling.

Samples can be secured from the bottom and corners of the bit after it is pulled from the hole, or by catching a bucket full of the sludge that is brought up in the bailer after the hole has been bailed down. Also, there are various cable-tool core barrels or so-called "biscuit cutters," which can be successfully used when drilling in comparatively soft formations. While these core barrels obtain the core in "biscuits," which usually range from one to four inches in length, due to the jarring action as the tools are spudded, they secure a larger and more representative sample of the formation being drilled.

After the bailer sample has been collected, it should be placed in a clean bucket and washed. This is usually done by placing the nozzle of the derrick hose on the bottom of the bucket, and a slow stream of water turned on to float out the mud. Hot water, if available, will cause the oil color to show up more readily and to the best advantage. After the sample has been washed in this manner until the overflow water becomes clear, it is ready for examination and testing.

Bailer samples should be examined first to ascertain the color, texture, and hardness. They should be examined carefully for small fossils, impressions of leaves, plant remains, salt, pyrite, mica, gypsum, and sulphur. If they are sand grains, the size, shape, and impurities should be noted. One must always be on the alert as to the possibility of contamination by cavings from the upper part of the hole below the casing shoe.

Frequently the samples are so finely ground by the bit that they are confusing unless certain chemical tests are applied to them. For example, a calcareous sandstone may resemble a limestone and oolitic limestone may appear to be sand grains. Dilute hydrochloric acid will cause chalk, limestone, and calcareous sandstone to effervesce rapidly; whereas, dolomite, calcareous clay, and marl will react slowly with cold acid. Sand grains coated with calcareous material are often misleading when this test is applied; that is, the effervescing of the surface coating may cause the casual observer to conclude that the sample is calcareous instead of siliceous. Well cuttings that may be sandstone, quartzite, chert, flint, gypsum, clay, shale, and igneous rocks will not react to this test.

When calcite and dolomite have been so finely pulverized by the bit that they

cannot be distinguished by use of a hand lens, the Lemberg solution test may be used at the well to good advantage. It is prepared by mixing four grams of aluminum chloride and six grams of extract of logwood with 60 grams of water, stirring and boiling for 20 minutes. A few of the previously washed cuttings may be placed on a watch glass, and one or two drops of the solution placed upon them. If calcite is present, it will be stained purple after two or three minutes. The dolomite, if present, will remain unchanged.

Such samples may be tested at the well by heating a small portion in a shovel at the derrick forge. They should be washel well before heating, and all pieces of iron and rusty scale should be picked out. A magnet may be used to good advantage in this process. If coal, asphalt, or oil is present, the samples will fume and then flame. Shale, clay, chert, quartzite, or sandstone will not be affected by heating to redness if they are removed from the fire before they begin to fuse. Limestone and dolomite will slake if placed in a small amount of water after heating to redness. Gypsum will change to a lighter color, but will not slake in water.

If the samples present evidence of containing oil, the chloroform or carbon tetrachloride test should be applied. The unwashed samples are pulverized, placed in a glass bottle, and covered with one of these liquids. The bottle is then corked, and the contents shaken at intervals during a period of 15 or 20 minutes. After this the contents may be filtered into a white dish or saucer. If oil is present, a dark-colored ring will be left on the filter paper. If any liquid residue remains in the dish after the chloroform or tetrachloride has evaporated, it is the oil that was in the sample.

After the preliminary testing at the well, it may seem advisable to take the samples to a laboratory where more accurate flame tests can be applied. Or, it may be necessary to subject the cuttings to detailed microscopic examination, or to separate and float out the heavy minerals by using hydrochloric acid, bromoform, and benzol.[1]

In areas where correlation of strata is doubtful, all samples should be carefully marked, and then saved for future reference. An ideal arrangement would be to have a supply of short, wide-mouthed four-ounce bottles having a screw top, as they make ideal containers. A filing cabinet having long, narrow, but shallow drawers should be available in the field office. On the front of each drawer a label should be placed, showing the well number and the depths between which the samples were secured. Within each drawer the sample bottles should be arranged in rows according to depth. Each bottle should be labeled to show the well number, depth, name of formation, if known, date collected, and kind of drilling equipment used; that is, whether cable or rotary-tools. All samples should be logged as they appear when wet.

Logging samples as they appear when wet, eliminates the time and care needed to dry them satisfactorily. If it is generally understood by the drillers, geologists, and others who may study the samples that they are to be bottled and labeled at the well while wet, there will be less danger of scattering, confusing, or contaminating them during the drying process, as they will be bottled immediately after being washed. Then, if it is necessary to examine the samples at some future time—after they have been dried out in the containers—it is a simple matter to re-wet them before an examination is made. This will be necessary to avoid confusion, since the color of a dry sample will appear quite different when wet.

Accurate depth measurement must be kept at all times. The care and precision exercised in washing and labeling the samples will be of little value if the drillers are careless in recording the exact depth from which the samples are secured. Steel line measurements are not very accurate if taken in deep holes of small diameter. Accurately measuring over the derrick and "flagging" the drilling line is the best method in deep wells. It would materially assist the geologist in correlating strata if all drillers in a particular area would use the same method of determining the depth of drill holes.

Sampling at a Rotary-Tool Well

While it is more difficult to obtain representative well cuttings when rotary tools are used, nevertheless, more accurate samples than those usually secured can be obtained if proper methods and care are used.

In cable-tool drilling it is a simple operation to cease drilling at any depth, and then run the bailer to secure samples of the formation being drilled. But when drilling with rotary equipment the bailer cannot be readily used. Furthermore, the bit usually many feet below the top of the formation before the cuttings begin to appear in the slush trench. Even then, the cuttings may be so completely coated with mud and contaminated that their proper identity may not be ascertained unless they are examined very carefully. The writer has seen small cuttings of oil sand so completely plastered with mud that they were mistaken for shale cuttings upon casual preliminary examination at the slush trench. Then, too, cuttings may be so badly scattered and disseminated throughout the mud fluid as to become inaccurate and misleading.

Formation samples at a rotary drilled well may be secured by several methods: (1) If it is necessary to change the bit, the pumps may be shut off and drilling continued for two or three minutes before beginning to pull the drill pipe. Due to the absence of pump pressure, some of the cuttings will cling to the bit, and can be secured at the derrick floor. (2) Flow samples can be trapped in the slush trench as the mud fluid emerges from the hole. And thirdly, by using one of the better types of core barrels that are available.

Accurate flow samples can be obtained by two methods: If a change in formation occurs, the careful driller will notice it by the change in the reaction of the mud pumps, the drill pipe, and the rotary table. The drilling string can be swung several feet above the bottom of the hole while all the cuttings are flushed out at the surface. After the slush returns are flowing free of all cuttings, drilling may be resumed. The first cuttings to appear in the trench will be from the new formation. Of course, this method, as well as all other methods of sampling and coring at rotary wells takes time, and is therefore expensive. In a 12-inch hole at a depth of 3500 feet, it will require about one and one-half to two hours to flush out the hole. The other method of obtaining flow samples is to "time the returns."

When using this method, it is necessary to know the efficiency of the mud pump and its capacity per minute. The volume of the drill pipe must be calculated in order to be able to estimate the time interval required to displace the mud fluid and the cuttings in the drill pipe; that is, the time in minutes for the fluid to reach the bottom of the hole. Then, since the volumes of two cylinders are in the same ratio as the square of their radii, the time to expect the returns at the surface can be readily computed. A permanent pump displacement table posted in the rig will make such calculations easy for most drillers. Of course, the depth drilled during this time interval must be noted, so as to log the change of formation at the proper depth. This method has been checked in several fields in Oklahoma and Texas by introducing shelled corn under the suction line of the pumps, and has been found to be accurate within from 2 to 3.5 per cent.

Within the last few years it has become common practice to run in some kind of core barrel when formation samples are desired. This practice is expensive, but it is usually more satisfactory than any of the methods mentioned above. And if properly executed, it should eliminate most of the uncertainty of drilling through oil-bearing strata, and will make correlation work much easier.

The first type of coring device used in rotary drilling was the "basket core barrel," which is simply a short length of drill pipe notched out at the bottom and screwed to the lower end of the drill pipe, thus replacing the bit. It is inexpensive and simple in operation, but is objectionable because the frictional heat generated often burns out all traces of oil. Then, too, the cores are usually short, as the weight of the drill pipe causes the teeth of the barrel to close in rapidly. Basket cores are rarely if ever more than 15 or 18 inches long, the average being about four to eight inches. This, of course, depends largely upon the character and hardness of the formation, and upon the skill and technique of the driller.

There are many types of core barrels on the market today, but only a few of them are satisfactory. However, the type of core barrel that permits the flushing of the hole before beginning to cut the core, as well as the double-walled core con-

[1]Tickell, F. G.—"Correlative Value of the Heavy Minerals." A. A. P. G., Vol. 8, No. 2-1924.

tainer type, are quite satisfactory, so far as securing a representative sample of uncontaminated core is concerned. It is difficult indeed to manufacture core head steel that is tough enough to prevent chipping and breaking and at the same time be hard enough to cut hard sediments with any degree of consistency. However, Stellite and especially Borium[2] probably will do much toward eliminating this disadvantage. If it were mechanically possible to take perfect cores with any degree of consistency, correct interpretation of sub-surface conditions could be easily and readily accomplished.

Until coring devices are perfected mechanically, many cores will continue to misrepresent the formation from which they are taken. A perfect core would be a continuous, unbroken sample, the diameter of which is large enough to show the true lithologic character, texture, and dip of the formation, and whose characteristics are unaltered in any manner while securing the sample. But as a matter of fact, much of the core of a soft formation is either washed away or pushed aside by the pump pressure and the rotation of the drill pipe, thus leaving a stratigraphic gap in the formation sample secured.

Also, the heat generated in the bottom of the hole may "burn" a loosely consolidated sand to a quartzite, a sandy shale may be changed to a hard mass resembling igneous material, and rich oil sands have been known to be fused into a black, carbon-like substance. The vibration and whipping of rotary drill pipe may cause the core to be broken up and churned around in the inner barrel until little of its original form and texture remains. Drilling mud may be pressed so hard and made so compact by pump pressure that it may resemble a shaley formation. Also, the pump pressure may be so great in deep holes as to drive all salt water out of the core, and thus lead one to believe that a fresh-water sand has been encountered. Pump pressure can also cause a core from a rich oil sand to appear as one not worthy of commercial possibilities.

Core samples should be examined at the well immediately after they are removed from the core barrel, for at this time they usually portray certain characteristics that cannot be observed later. If gas is present, it will be noticed by bubbling as part of the liquid content is expelled. If the core presents evidence of containing oil, a test should be made at once, or the sample should be sealed in a Mason jar to prevent loss by evaporation and oxidation.

The cores that are to be taken to the field office or laboratory for examination should be wrapped in wax paper and then placed in metal or wooden trays. This will preserve them while in storage and during transportation.

Before intensive examination is begun, the outside of the core should be thoroughly washed, scraped and brushed to remove the outer coating of mud and other foreign material which usually obscure the real character of the formation sample. The core should then be split lengthwise. This can be done with a hammer and chisel, but a hack saw or ordinary hand saw is much better. At this time a binocular microscope or a good hand lens should be used to aid in the examination.

If a core is found to contain oil, a porosity test[3] should be made, as the rate of production and the storage capacity of the "sand" are directly dependent upon the size and amount of the pore space between the grains. If the sample to be tested for porosity should contain oil, it should be thoroughly washed in carbon tetrachloride or petroleum ether before the test is begun.

As has been intimated in this article, up to the present time sampling and coring methods and devices have not been developed to a very high degree of perfection. But this phase of production methods is now receiving more careful study than ever before. The driller, the petroleum geologist and petrographer, and the petroleum engineer, as well as the core barrel patentees, are all cooperating favorably toward more efficient methods and devices for securing samples, as well as toward a more thorough and complete interpretation of them.

[2]Garretson, R. G.—"Oil Field Engineering," December, 1927.

[3]Melcher, A. F.—"Determination of Pore Space in Oil and Gas Sands," A. I. M. E., Vol. 65. Russell, W. L., "A Quick Method of Determining Porosity," A. A. P. G., Vol. 10, No. 10.

Marland Reorganization Plan Announced

Ponca City, Okla.—Plans for the reorganization of the Marland Oil Company have been announced by E. W. Marland. The Marland Production Company, with headquarters at Ponca City, is to absorb the holding company, which now operates the three subsidiaries, Marland Oil Company of Oklahoma, Marland Oil Company of Texas, and Marland Oil Company of Colorado.

Announcements to this effect came last week, co-incidentally with his acceptance of resignations of J. K. Cleary, president of the Marland Oil Company of Oklahoma and a vice president of the holding company; John S. Alcorn, also a vice president, and Seward R. Sheldon, treasurer. With the announcement of their resignations comes the statement from these men that they plan organizing an independent company to operate in the Mid-Continent territory. Their resignations will not become effective until a meeting of stockholders of the Marland Company in May.

Mr. Marland will be president of the Marland Production Company, and C. C. Brown will be executive vice president and general manager of the company. Directors of the newly formed company will be: A. W. McCoy, J. R. McGinley, W. A. Moncrief, T. L. Jolay, I. G. Harmon, and G. G. Shallenberger. R. E. Clark will be treasurer.

The status of the Marland Company during the past two years is seen by the fact that in 1926 an earning of $11,250,000 was shown, against a loss of $7,691,000 in 1927.

High Gravity Crude Increased in Price Adjustment

(Continued from page 16)

Fruitvale is pumping at the rate of 200 barrels and is acting very much like the average Kern Front producer.

Movement of fuel oil since the first of the year has been rather slow. It is this commodity that is affecting the California market most. Domestic consumption has decreased slightly, in addition to a poorer demand from foreign countries.

The consumption of gasoline in California is very high, good weather having stimulated sales considerably. Consumption during the first quarter promises to break the record established last year.

Readjusting Marketing in Mountain Region

Casper, Wyo.—Changed conditions have been responsible for almost a complete realignment of the oil industry in the Rocky Mountain region. Standard Oil Company of Indiana and the Midwest Refining Company, in order to pay out on their enormous refineries investment in this territory, are going into the marketing business and have purchased strings of filling stations in all of the Rocky Mountain States. This will mean that the refineries in the territory will be kept running at capacity to supply the local market, and that there will be an end to an attempted competition with the Mid-Continent regions.

In Canada the Imperial Oil Company, Ltd., has been readjusting its crude purchases for its Canadian refineries. Heretofore the Imperial has purchased almost all of its crude for the Calgary and Regina plants from the Wyoming fields. While it still is buying Lance Creek, Parkerton and Salt Creek crudes in Wyoming for its Calgary works, it has now arranged to buy crude for the Regina plant from the Seminole field. The rate from the Seminole is practically the same as that from Wyoming fields, and thus the Imperial can effect a considerable saving since the Seminole crude can be purchased by contract lower than can the Wyoming.

The new alignment has been forced, to a great extent, by the loss of the foreign contracts for export shipments from Baton Rouge, La.

Little River Shut-Down Agreement Extended

Tulsa.—Seminole operators meeting here Tuesday on the Little River situation agreed to extend the shut-down in sections 33-8-6 and 5-7-7 areas to April 1, as in 14 and 16-8-5 wildcat producers.

Wildcat producers south of Little River, including sections 13 and 23 in 7-6, will be offset for development March 1 with drilling restrictions to be decided by a committee.

Production of Oil from Coal and Lignites

The following information was submitted to the Federal Oil Conservation Board by the Bureau of Mines, in connection with its investigation of the oil resources of the United States, and was printed as Appendix Number 3 to the Second Report of the Federal Oil Conservation Board.

The original reserve of bituminous, sub-bituminous and semi-bituminous coal in the United States within 3000 feet of the surface have been estimated at 2,482,545,000,000 tons. Approximately 20,000,000,000 tons or less than 1 per cent) have been mined, or lost in mining, leaving a reserve of about 2,460,000,000,000 tons. This coal will yield an oil somewhat similar to petroleum, and assures us of an adequate reserve of oil for centuries to come, provided, of course, the demand and price would justify its extraction. It has been estimated that this amount of coal would yield 525,000,000,000 barrels of heavy liquid fuel or 92,000,000,00 barrels of motor fuel. No estimates are available as to the cost of obtaining products similar to petroleum from this source, but almost every one is agreed that it is considerably above current prices for the different products.

The reserves of lignite in the United States are estimated at about 940,000,000,000 tons, capable of yielding 70,000,000,000 barrels of liquid fuels or 12,000,000 barrels of motor fuel. Again it is a question of price as to when these products could be made available.

The production of oil from coal and lignite offers certain advantages over the use of oil shale for that purpose in that the deposits are found in almost every section of the country, some of the largest deposits being near important marketing centers. Also, the residue from the distillation of coal and lignite is a valuable fuel, whereas spent shale is practically worthless, and its disposal means an additional expense in the production of oil. As in the case of the oil shale deposits, some of the large deposits of coal are in semi-arid districts where there is the problem of obtaining an adequate supply of water for mining, retorting and refining operations. Owing to the movement toward elimination of smoke in the cities, it is possible that it will be distilled in increasing amounts for the production of smokeless fuel, and that liquid products will continue to be by-products of the distillation process. In case distillates are produced only as by-products, and smokeless fuel is the main product of the industry, the production of substitute fuels would amount to only a small percentage of the present production of petroleum products since the market for the main product would be limited to something less than the consumption of bituminous coal.

Since the volume of lubricating oils, kerosene, etc., that will be needed to meet the demand for many years can be made from considerably less crude petroleum than is produced at the present time, it is necessary to consider only the question of the manufacture of motor fuel from other sources. The following discussion of the problems involved in obtaining motor fuel from coal was abstracted from a paper by A. C. Fieldner, of the Bureau of Mines, on the subject, "Future trends in automotive fuels." This paper was published in the October, 1926, issue of the Journal of Industrial and Engineering Chemistry.

Motor Fuel from Charcoal

The processes for obtaining a motor fuel from coal may be grouped in four classes:

(1) The high-temperature carbonization of coal, including the gas and coke manufacturing industry.

(2) The low-temperature carbonization of coal.

(3) The hydrogenation and liquefaction of coal by the Bergius process.

(4) The complete gasification of coal and conversion of the resulting gases by pressure synthesis into methanol, synthol and other liquid combustibles.

Of these processes, only the high-temperature carbonization is in commercial use, if we except the distillation of brown coal in Germany, which is done at low temperature. A number of large-scale experimental units still in a developmental stage are operating intermittently both in this country and abroad. The principal object in most of these experiments is the production of a convenient form of smokeless solid fuel. Any considerable increase in the price of liquid fuel would make some of these low-temperature processes commercially successful.

The partial liquefaction of coal by heating at low temperature under high pressure of hydrogen by the Bergius method has been verified by a number of European laboratories, and large-scale experiments at Mannheim by Bergius have shown that the process can be applied to a great variety of coals and lignites. The costs of the process are not available, but probably are too high to permit the process coming into use while petroleum is available in fair quantity.

The synthesis of methanol from carbon monoxide and hydrogen has been in commercial operation in Germany for nearly two years. Fischer, Patart, Audibert and others also have demonstrated by laboratory experimentation that the synthesis of motor fuels from the constituents of water gas is a future probability. These and similar synthetic processes have the advantage of being independent of the disposal of other products and can therefore be developed to furnish any desired quantity. The economic significance of the Bergius and the synthetic processes will become apparent as we show the yields and the possible total production from carbonizing coal wherein the motor fuels is a by-product. The total quantity of any by-product is necessarily determined by the market demand for the main product.

Approximately three to four gallons of crude light oil are obtained by high-temperature carbonization of one ton of coal. Sixty to seventy per cent of this light oil is suitable for motor fuel after proper refining, making the net yield per ton about 2.5 gallons. The total coal coked (including beehive ovens) in 1923, which was higher than in 1924, was 55,500,000 short tons, which if all coked with by-product recovery would yield 138,800,000 gallons of motor fuel benzol or 1.3 per cent of the 10,886,000,000 gallons of gasoline produced in 1925. If the entire 1923 output of 545,500,000 tons of bituminous coal were put through by-product ovens, the yield of motor benzol would be only 1,362,750,000 gallons, or 12.5 per cent of the gasoline produced in 1925. Obviously, coke-oven light oil can never supply more than small portions of future motor-fuel requirements, and can readily be absorbed as an anti-knock constituent for blended fuels.

Ethyl Alcohol from Coal Gas

An interesting new by-product experiment has been in progress during the past year or two at a coke-oven plant at Bethune mines in France. The coke-oven gas is used as a raw material in a Claude plant for the manufacture of synthetic ammonia after separating the light oil, ethylene and other constituents by compression and refrigeration. The ethylene is converted to ethyl alcohol via the ethyl sulphuric acid process. The yields of alcohol are probably between 1.5 and 2 gallons per ton of coal. The possible ultimate recovery by this process, should it eventually work out successfully, would increase the total motor fuel yield from coke-oven plants about 65 per cent. Ethylene from crack-stills and oil-shale plants can likewise be converted to alcohol.

Low-Temperature Carbonization

Low-temperature carbonization is often cited as the process which will

solve the problem of future motor fuel supply. In this process coal is heated to 450 degrees to 700 degrees C. instead of 1000 degrees to 1300 degrees. The tar yields per ton are from 20 to 35 gallons, or two to three times that obtained by high-temperature carbonization. Also, the tar resembles petroleum in some respects. Low-temperature tar consists of one-third to one-half tar acids and higher phenols, and the remainder is hydrocarbons —saturated, unsaturated and cyclic. It does not contain benzene, toluene, napthalene or anthracene, and very little phenol or cresol, all of which are found in high-temperature tar. From 1 to 2 gallons of light oil may be scrubbed from the gas, and another gallon or two distilled from the tar, the total yield being 2 to 4 gallons. In a sample of non-coking western bituminous coal, Brown and Cooper found the oil boiling between 20 degrees and 200 degrees C. to consist of the following compounds.

Compound	Per Cent
Pentane	2
Isopentane	8
Amylenes	30
Hexanes	10
Hexenes	17
Heptanes	7
Heptenes	5.5
Cyclic olefins (of 7 carbon atoms)	3.5
Octanes and above	7.5
Octenes and above	9.5

The 65 per cent olefine in this oil gives it a high degree of anti-knock properties and therefore it is a valuable material for blending with straight-run gasoline. This oil was relatively free from diolefine, which are recognized gum-forming constituents.

Refining losses would bring the net yield of motor fuel from gas scrubbing and straight distillation of the tar to about the same figure per ton of coal as obtained in high-temperature carbonization. However, Morrell and Egloff have shown that about one-fifth of the total tar can be converted into Navy end-point motor fuel by pressure cracking, and they predict an ultimate yield of 30 per cent as a result of research in this direction. There is also a possibility of Fischer's method of reducing the phenols to benzine, giving a furher material increase in the motor-fuel yield. It is, therefore, reasonable to assume a future yield of one-third more fuel from low-temperature tar, which amounts to 7 to 12 gallons, or an average of 10 gallons per ton of coal carbonized.

Assuming that 136,000,000 tons of bituminous coal, approximately one-fourth of the 1923 output, are carbonized at low temperatures, the motor fuel yield on the basis of 10 gallons per ton will be 1,360,000,000 gallons, or 12 per cent of the 1925 gasoline production. It is evident that the maximum probable development of low-temperature carbonization, while furnishing a material quantity of motor fuel, cannot satisfy the entire demand. We must turn to processes in which motor fuel is the principal product rather than a by-product.

Of these the Bergius process deserves serious consideration, since it converts from 30 to 50 per cent of the coal into tar and oils, the yield varying with the type of coal and the conditions of hydrogenization. An attractive feature of this process is that it is applicable to low-rank, non-coking coals and lignites, of which there are large deposits in the Western States. In this process, pulverized coal mixed with oil or tar to form a thick paste is heated at 400 degrees to 450 degrees C. in an atmosphere of hydrogen under a pressure of 150 to 200 atmospheres. About 5 per cent iron oxide is included to remove sulphur compounds. Under these conditions the coal is converted into a black tarry liquid, which on separation from the ash and undecomposed residue yields from 35 to 50 per cent of crude oil, or 93 to 133 gallons per short ton off coal. Bergius reports a test on an Upper Silesian gas coal from which 140 gallons of crude oil per metric ton of dry coal were obtained. This crude oil on straight distillation and refining yielded 40 gallons of motor fuel, 50 gallons of Diesel engine oil, 35 gallons of fuel or creosoting oil, a pitch residue, and 10,000 to 12,000 cubic feet of gas. The motor-fuel fraction is said to consist of saturated aliphatic, aromatic and hydro-aromatic compounds. Olefine are said to be absent. The crude oil contains phenols, but presumably in much smaller quantity than in low-temperature tar. Ormandy and Craven examined the light-oil fraction distilling from 40 degrees to 160 degrees C, obtained in the hydrogenization of an English coal. The yield of gasoline was approximately 10 per cent of the weight of the coal (34 gallons per short ton). The washing loss was only 1 per cent, and the gasoline consisted of unsaturates 3.1, aromatics 7.6, napthenes 51.7, and paraffins 37.6 per cent. This composition indicates excellent "anti-knock" properties.

The practical difficulties to be solved in commercializing the Bergius process are the development of autoclaves of suitable metal and design to withstand the high temperatures and pressures required over five years or more of continuous use and the development of a cheap method for obtaining the hydrogen necessary from the distillation gases. However, the process has reached a sufficiently advanced stage of development that it could be carried on to commercial success under the stimulus of a petroleum shortage. Assuming that 2 tons of coal yield 1 ton, or 6 barrels, of crude oil, then 252,000,000 tons of coal would be required to produce the 1925 production of 755,852,000 barrels of petroleum. In other words, our present annual bituminous coal mined per annum would need to be increased about 50 per cent.

The investigations of Patart and Audibert in France, and of Fischer and the Badische Anilin and Soda Fabrick in Germany, together with the production of methanol from carbon monoxide and hydrogen on a commercial scale by the latter, present another route from coal to motor fuel. In this process, pure methanol is produced from pressures of 150 to 250 atmospheres and temperatures from 300 degrees to 425 degrees C. in a copper-lined reaction chamber, containing one or more of a number of catalysts which include zinc oxide or oxides of chromium, vanadium, manganese, tungsten, uranium, lead and bizmuth. The cost reported from both French and German sources varies from 18 to 27 cents per gallon. There are no by-products.

Road tests in Germany reported by Fischer and Tropsch with a four-cylinder truck and by Dumanois in France showed that the miles per gallon of methanol was approximately half that obtained with gasoline. The addition of 5 per cent water to the methanol was necessary to prevent back-firing, and after the addition of the water, satisfactory service was obtained with a compression ratio of 6 to 1. There was no detonation. One disadvantage of methanol is its lack of miscibility with straight-run gasoline. Nevertheless, some blend can probably be worked out with a third component, and in view of the similarity in the method of manufacture to that of synthetic ammonia, methanol will doubtless receive serious consideration as a future motor fuel.

Synthol.—Of equal interest from the laboratory standpoint is the product obtained by Fischer and Tropsch by a method similar to the methanol synthesis but using a different catalyst. Instead of pure methanol they obtained a mixture of alcohols, aldehydes, ketones, and acids with aliphatic hydrocarbons containing up to eight or nine carbon atoms in the molecule.

Synthol appears to be a better motor fuel than methanol, but the low yields, 27 per cent as compared to 85 to 90 per cent for methanol, must be greatly increased before it can be considered as an equal possibility for motor fuel.

However, the Kaiser Wilhelm Institut at Mulheim is continuing research in this field, and Fischer and Trepach have recently repeated the synthesis of higher homologue of methane from carbon monoxide and hydrogen at atmospheric pressure and a temperature of 270 degrees C. in the presence of finely divided metals of the eighth group, alone or mixed with metallic oxides such as those of zinc and chromium.

Other research laboratories are now also working along these lines, so that further developments in synthesizing motor fuels may be expected in the future. At the present time, the Bergius process seems the most promising for the conversion of coal to liquid fuel, because it is a more direct route than the others and does not involve expensive gas purification processes or the use of easily poisoned catalysts.

Gulf's Sorrento Dome Well Flowing 5000 Barrels

Third well completed by Calcasieu Oil Company on Kelso Bayou dome; producer at Sweet Lake is 5924 feet deep

By JACK LOGAN
Staff Representative

HOUSTON—Some of the most important developments in the Gulf Coast during the past week were in South Louisiana, the activity in that region including the opening of Gulf's new well on the McElroy-Sorrento dome, Ascension Parish, for its first real test, the completion of the third and best well by the Calcasieu Oil Company on the new dome on Kelso Bayou, in the Hackberry district, Cameron Parish; and the bringing in of a large well at Sweet Lake, Cameron Parish, by the Pure Oil Company—the deepest producer thus far completed in the Gulf Coast. In addition to these South Louisiana producers, various wells were completed in Coastal Texas, including several large ones at Spindle Top and Pierce Junction. In all, more than 12,000 barrels of new oil was the reward for the week in Gulf Coast operations.

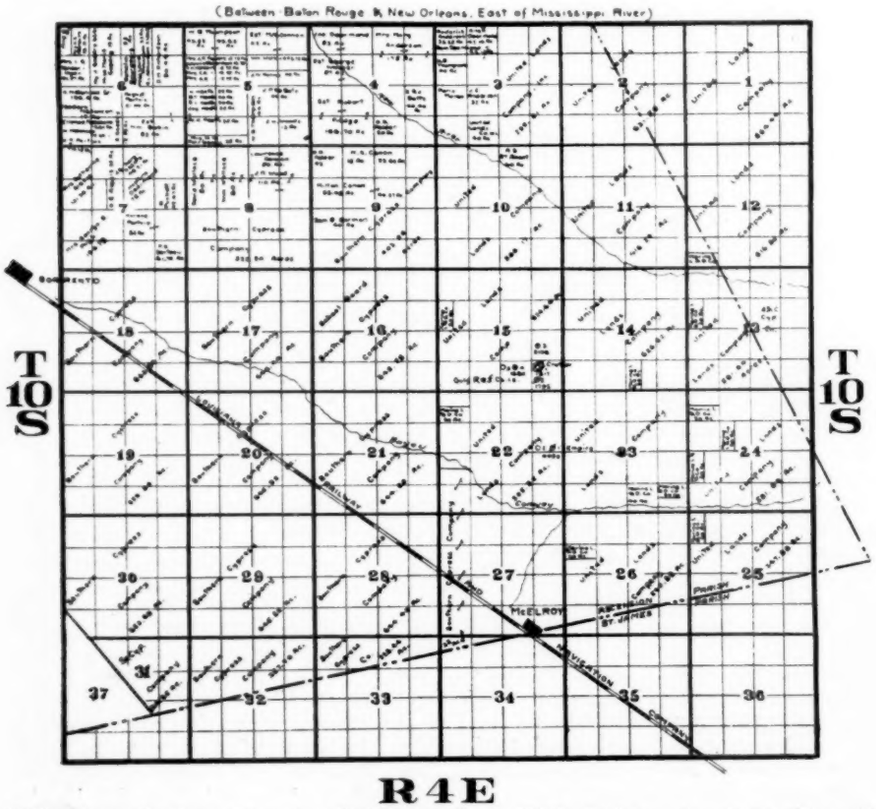
Late last week the Gulf Refining Company of Louisiana opened up its United States Lands Company 4 on the McElroy-Sorrento dome, in Ascension Parish, east of the Mississippi River; and it began making gas and 10,000 to 12,000 barrels of fluid, of which 40 per cent was water and the rest 26 gravity oil. Early this week the flow had been pinched in to a one and one-half-inch choke, and the well was making from 5000 to 6000 barrels, including 4 per cent water.

The present flow of the new producer is the first definite indication that an important oil producing area has been opened, as the well was allowed to flow only 15 minutes when completed several weeks ago—because of lack of storage. The present production is being taken care of by 5500 barrels of steel storage and some earthen storage. No definite plan has been made yet for handling the oil, but if continued production justifies it, a pipe line will be laid from the dome to the Mississippi River, a distance of about six miles, and the crude will be transported thence by barge.

The presence of water in the production of the new well does not necessarily detract from the possibilities of the area, it has been pointed out, as the production is from the cap rock, against the dome. The depth of the hole is 1670 feet. This circumstance—water in the wells close in on the dome, near the cap rock—has been characteristic of most of the important cap rock fields of the Gulf Coast, including Spindle Top, Evangeline, Batson, Humble, Sour Lake, and Boling. In all those fields the wells close to the dome made water, but others farther removed from the dome did not.

Gulf has started drilling a new test on the dome, the United Lands Company 5. No extensive drilling campaign is expected, as no other companies hold any close-in acreage. Gulf's leases comprise 4150 acres, including all of sections 10,11, 14, 15, 22 and 23. The producer and the present drilling test, as well as Gulf's previous three tests on the dome, are in section 15. The accompanying map shows the locations of the various tests.

This dome was located by seismograph early in 1927. The new well, being only the fourth test drilled on the dome, emphasizes the importance which geophysical methods have assumed in uncovering hidden oil pools in the Gulf Coast. Although various domes discovered geophysically have given up production only after extensive drilling, and others have remained unproductive after numerous tests, yet this new dome in Ascension Parish is the third one in South Louisiana where early tests have been successful. At Fausse Point (or Loreauville), Iberia Parish, the first test was a producer; and on Kelso Bayou, Cameron Parish, the Calcasieu Oil Company made a producer of its second test on the dome.



McElroy-Sorrento Dome, Ascension Parish, Louisiana. Gulf's producer, present operation and former tests are in Section 15. Gulf leases comprise 4150 acres, including all of sections 10, 11, 14, 15, 22 and 23.

Calcasieu Oil Company Well

Coming in as the third and the largest producer on the Kelso Bayou dome, in the Hackberry district, Cameron Parish, the Watkins 1, drilled by the Calcasieu Oil Company and owned by that company together with the Union Sulphur Company and Magnolia Petroleum Company, was completed on February 19, for an initial flow of 2500 barrels through a one-half inch choke. The top of the pay sand of the well is at 3958 feet, being about 17 feet higher than in the Caldwell 2 and the Olevia 1, the other two producers on the dome. The production is pipe line oil, and tests about 22 gravity, as that in the other wells. The Watkins 1 is about 100 feet northeast of Caldwell 2 and about 200 feet in that direction from Olevia 1.

The first two producers are now making about 60 per cent water, but the oil content of Olevia 1 is still high, amount-

(Continued on page 28)

Propose Curtailment of California Production

Operators are formulating plans which would shut in 75,000 barrels daily, as means of stopping accumulation of heavy oil

By BRAD MILLS
Staff Representative

LOS ANGELES. — A curtailment program which would reduce California production by more than 75,000 barrels is being formulated by the leading producers of the State. Dissatisfied with the slight overproduction of heavy oil, and handicapped by heavy stocks of fuel oil, steps are being taken to shut in about 50,000 barrels of heavy oil and around 25,000 barrels of light production. These figures are approximate, however, and may be slightly smaller if serious opposition is met.

Although several fields will be involved if the program is carried out, the Ventura field probably will be effected most. This area has received special attention for several reasons. The enormous waste of gas, the fact that only a few operators control the field, and, most of all, the feasibility of curtailing both oil and gas at one stroke have combined to make the field an ideal nucleus to work from. If present plans are carried out, about 10,000 barrels of oil and more than 50,000,000 cubic feet of gas will be shut in. The curtailment of such a volume of gas would almost exactly take care of the amount now wasted.

Other fields which probably would be affected are Brea-Olinda, Coalinga and several Kern County areas. Wherever it would be possible to shut in production without working a hardship on the operators, curtailment would be put into effect. Due to the complicated nature of the Long Beach field, it is not believed that much could be accomplished in this area. It is hoped that curtailment elsewhere will at least offset the flood of crude expected from Long Beach during the spring months.

Stocks of light oil in California have shown a steady decrease for more than a year, but heavy oil stocks, which include all grades of fuel oil, increased several million barrels during 1927. By refining the light oil, heavy stocks have reflected an increase, due to the poor demand for fuel oil. In reality, a part of the light oil is reduced to storage in the form of fuel oil. Such a condition has weakened the whole structure of the market, since the additional heavy stocks must be carried in storage.

It is largely due to the poor demand for heavy stocks that the operators are working diligently on a curtailment program. No definite plan has yet been decided upon, but it is believed that a large production will be shut in at an early date.

The general committee recently appointed by E. W. Clark to study means of conserving surplus gas in several California fields met February 17 in Los Angeles and made certain recommendations to the governor's committee. A further survey will be made through the various field committees. The general committee is not working in conjunction with the movement to curtail oil production, but it is known that it is in sympathy with any program that will conserve the natural resources of the State.

With 14 wells coring through the oil sand below the final water shutoff and an additional 25 wells drilling below 5000 feet, another month should see the completion of many representative wells in the Long Beach field. The greater number of deep tests are considerably behind schedule. Along the east end of the field, where some of the largest deep wells have been completed, production has declined at a very rapid rate. One well completed with an initial production of 4400 barrels has declined to less than 600 barrels within two months. The completion last week of a 360-barrel well in the same part of the field tends to confirm the theory that the edge wells will decline rapidly from their initial output. The 40 deep sand wells are producing about 50,000 barrels, as against 70,000 barrels for the several hundred old wells. Faulty cementing jobs have accounted for 10 temporary failures in the deep sand.

The Bolsa Chica Oil Company completed Mutual 4 with an initial production of 2440 barrels. The oil was 29.2 gravity and cut about two per cent. The well is in the Lovelady pool and was completed at 5965 feet. The Rio Grande Oil Company fell far below the usual run of deep wells in the completion of Municipal B-1, which came in with an initial production of only 357 barrels from 5663 feet. The oil was 31 gravity and practically clean. This well is located in the east side of the field and near Richfields' Booth 8, which was one of the largest wells completed in the deep sand. The first well in any particular part of the field usually produces at a high initial rate, but declines rapidly when other completions are made nearby.

Ignoring the small wells completed in the deep sand by the Marland and Richfield, operators in the Alamitos Heights sector of the Seal Beach field have decided to do a little exploring in their own behalf. The Pan American Oil Company is now deepening Naples 2 and 6, both of which are headed for the 6600-foot level, if necessary. Naples 2 is drilling at 5130 feet and Naples 6 at 5263 feet. George F. Getty, Inc., and J. Paul Getty, independent operators who were especially successful in the Selover and Wasem sands, are drilling tests to the new sand. The former has already reached 6375 feet in No. 12. All of these wells should be representative tests, and should pretty well determine the value of the lower sand. Marland has again placed Selover 16 on production, but the well is producing only 600 barrels. Such a production from 500 feet of sand is not considered significant. Richfield is still producing Bonner 1, the first completion in the deep sand. With about 200 feet of sand, the well is producing only 300 barrels. Marland's Selover 11 is due for completion during the week and may throw additional light on the new sand. If a 2000 barrel well is completed, at least 25 wells would start for the new level. As a result, however, production in the Alamitos Heights area would drop to about one-half of the present figure.

The Pacific Eastern Production Company's discovery well at Fruitvale is still on the pump, but is not producing satisfactorily. The fluid level is high but the excess gas affects the action of the pump valves. The well will flow occasionally by heads, but the volume is small. The gas pressure is inadequate for flowing the well, yet is too high for successful pumping. The average production has been about 175 barrels. No announcement has been made concerning the location of other wells, but it is thought the Pacific Eastern will drill another test nearby. Several other companies holding leases on the flank of the structure are considering new locations.

Rincon

No new wells were completed in the Rincon field during the week. The operators are still undecided on the best course to pursue relative to the discovery sand. They have wrestled with the water in the few completions already made, but first want to satisfy themselves that the upper formation

holds little promise before recommending that it be completely ignored. The Pan American fought water for two months in the discovery well, only to complete it as a small producer in the very top of the sand. Apparently, streaks of water sand are laminated with the oil bearing layers. Since some parts of the field have not been tested, it is possible that the sand is more uniform in those sections. Such a condition is not considered probable, however. Judging from the logs of wells drilled on the flanks of the structure, another deeper sand will be found. The Ventura field also indicates such a condition.

Both the R. & G. Oil Company and the Palmer Union Oil Company are planning the development of leases lying outside the present producing limits of the Cat Canyon field. Very little wildcatting has been done near the field since it was discovered several years ago. The R. and G. interests has located a well on the northwest quarter of section 30-9-32, which is regarded as only semi-proven territory. The Marland Oil Company formerly owned a part of section 30. Palmer Union will develop its leases around the edge of the field. The company is already producing several wells and has a large production. The Cat Canyon field produces some of the heaviest oil found in California, but the crude finds a ready market. It is particularly valuable as road oil. Gas lift installations have proven unusually successful.

The old Coalinga field, years ago the talk of California but now one of the quietest fields in the state, showed a slight increase in production during the week, due to the opening up of eight wells on section 26-19-15 by the Shell Company. The increase was less than 1000 barrels but added a somewhat firmer tone to the field developments. The natural decline of the wells is very small.

Brea-Olinda

The Brea-Olinda district has come in for much attention, following completion of a 4600-barrel gusher by the Shell Company. The old field has been plugging along for years, but occasionally the fault line is tapped and a very large production obtained. The Shell well cleaned up in rapid order and is still producing like a real gusher. Gas production is nearly 3,000,000 cubic feet, an unusual figure for an old, settled field. The gasoline content is above two gallons per thousand feet. The district has been the scene of many deep tests, but the new Shell well is the greatest producer for years —deep or shallow.

The settled fields of the Los Angeles basin are showing a gradual decline, with only an occasional completion to arrest the downward tendency. Aside from the critical areas, tests in the deeper sands have shown little promise. The Brownmoor Oil Company has been unable to effect a water shutoff in its deep test in the Inglewood field. The success or failure of this well will have an important bearing upon deep sand possibilities. A few deep wells have been completed in the Rosecrans field, but only two wells are now drilling in the deeper formation. The deep tests in and near the Huntington Beach field look very doubtful.

Stopping almost 1500 feet above the record depth established a few weeks ago at Ventura, the Associated Oil Company has completed Lloyd 35 as a 2800 barrel producer at 5600 feet. The Completion of the well proves that practically every level below 5500 feet may be depended upon to produce at a high rate, barring mechanical trouble. The oil was 30.4 gravity and cut only 1.6 per cent. The well carries two strings of casing, the 11-inch having been cemented at 3900 feet and the nine-inch at 4650 feet. A string of three-inch tubing was run to 4500 feet. The new well is producing more than 4,500,000 cubic feet of gas. The Shell Company's Eidson 19, which was recently completed as an 1800 barrel well at 7100 feet, is still producing about 1400 barrels. It is one of the few oil wells ever completed below 7000 feet and is now the only large producer in the world at such a depth. The Associated recently completed a well below 7000 feet, but production declined rapidly to about 400 barrels. The potential value of the Ventura field is not known, but with a producing sand considerably more than 2000 feet thick and a gas pressure great enough to flow the wells almost indefinitely, the field will be an important factor in California after many of the present fields are forgotten. Every effort is now being made to conserve the surplus gas. The life of the field is largely dependent upon an adequate gas pressure, due to the great depth of the wells. The gas-oil ratio is not satisfactory in many instances, but the chief operators are studying the situation with a view of reducing the gas volume where possible.

All fields along the western fringe of the San Joaquin valley are quiet, with only an occasional completion recorded. The Standard Oil Company has completed No. 52, Section 29-31-24, as one of the best wells of the year. Initial production was 400 barrels. Total depth was 4580 feet, with a string of 6⅝-inch casing at 4570 feet. The company was unable to make a commercial producer of Rass 4, in the Sunset field, although the well had the ear marks of an oil well. The gas pressure was very high but failed to bring the customary oil. The well is being drilled deeper from 5375 feet. The Carneros Oil Company has turned its leases in the Belridge field to the Barry Oil Company and will probably cease active development in the immediate region. The Berry interests will drill deeper in No. 44, section 30-28-21, and will do additional work on No. 13, which has been plugged back to 665 feet. The former had been drilled to 450 feet.

Gulf's Sorrento Dome Well Flowing 5000 Barrels

(Continued from page 26)

ing to about 1000 barrels daily. Caldwell 2, however, is making only 100 barrels of net oil daily.

The other two tests of the Calcasieu Oil Company, Union Sulphur Company and Magnolia Petroleum Company on this dome, are rapidly approaching the pay level. Early this week Doiron 1 was drilling at 3400 feet in sand, and Watkins 2 was at 2872 feet in hard sand and lime. Noble et al's Ellender 1, located about one mile from the producers of the dome, was still fishing early this week, with the total depth of the hole at 4335 feet. Yount-Lee Oil Company is also drilling on the dome, its locations being in Kelso Bayou on state leases close in to the producers of the dome. This company's State Land 7 was down below 2600 feet last week.

Deepest Coastal Well

Pure Oil Company's new producer at Sweet Lake, Cameron Parish, is Sweet Lake 4. It was completed on February 18, and came in flowing 2000 barrels of 28 gravity oil from 19 feet of sand at 5924 feet. It is the deepest producer thus far completed in the Gulf Coast. Previously the record for depth was held by Pure's Sweet Lake 3, in the same field, its depth being 5897 feet. The Sweet Lake 3 recently sanded up and is being cleaned out. Besides the new well, Pure has one other producing well at Sweet Lake, Sweet Lake 5, completed a little over a week ago. No. 5 is now producing about 600 barrels of oil a day, together with about four and one-half million feet of gas.

The Sweet Lake field is noted for the fact that it is one of the few fields of the Gulf Coast where indications of a salt dome have not been found.

Outside of the above mentioned completions in South Louisiana, there were ten other producers completed in the Gulf Coast during the past week. At Spindle Top the Gulf Production Company completed its Marrs McLean A-18 for 1800 barrels at 5100 feet and Sun Oil Company completed its Coit 1 for 2000 barrels at 5000 feet. Those two wells at Spindle Top were the largest of the week. Pierce Junction, however, furnished two good wells: Gulf's E. R. Taylor et al, a 1000-barrel well, at 4700 feet, and the Navarro Oil Company's Cain 4, 800 barrels, at 5075 feet. Gulf completed its Davis 36 at Big Creek for 300 barrels from 2550 feet, and its G. E. Smith 6 at High Island, for 550 barrels at 2925 feet, both wells having been drilled deeper from higher pay levels. At Vinton, Gulf Refining Company of Louisiana made a pumper of its Star-Vincent 44, which produced 150 barrels, 40 per cent water and b.s. from 2460 feet. The other three new wells of the week in the Gulf Coast were at Hull, Republic Production Company's Dolbear 94 being completed for 500 barrels at 2710 feet, while on the Phoenix Development Company lease Gulf completed its No. 88 for 250 barrels at 2250 feet, and its No. 83 for 100 barrels at 3640 feet after deepening.

Hendrick Field Production at New Peak

Output of West Texas field has doubled within eight weeks although many wells are still being pinched; oil to storage

By H. H. KING
Staff Representative

SAN ANGELO, Texas—Production in the Hendrick field has been doubled within the past eight weeks, with a large quantity of production held back at completed wells for lack of storage and pipe line facilities. Only two of the 15 concerns holding production in this flush field are producing their completed wells at a maximum rate, although water trouble is a factor in some wells being pinched. Nearly one-half of the completed wells in the field are making water along with the oil, and this encroachment of water is causing the operators to speed up developments.

The long delayed completions to the north and east of the Hendrick field failed to make much headway during the past week owing to heavy gas production in the upper series of the lime horizon, but nearby tests are being drilled without waiting for these pioneer tests to extend the oil producing area.

Independent Oil & Gas Company's Cowden McCabe 1, located in the northwest part of section 36, and a mile east of production, cored a good show of oil and gas last week and cemented casing at 2285 feet. Independent holds lease on the full section, being the largest undivided lease in or near the field. Sheldon & Burden's Hendrick 1, located on the southeast side of the field, failed to respond with commercial production after given a light shot at a total depth of 3043 feet and will be shot again.

Hendrick field assumed top rank among the individual oil fields in the country during the past week by averaging 118,160 barrels daily from 76 wells, or an average of 1555 barrels daily per well. This field surpassed the Earlsboro section of the Seminole district by a narrow margin. Humble led the list of producers with a daily average of 16,230 barrels from six completed wells, and Atlantic Oil Producing Company trailed closely behind with 16,205 barrels daily average. Atlantic's big production was largely due to the open flow made of its Hendrick 1-E, section 41, which is credited with having flowed above 12,000 barrels daily February 13 and 15, but had to be pinched somewhat on the sixteenth because of the appearance of a trace of water.

Gulf Production Company's Hendrick 1, which was the third completion in the field and one of the first of the larger producers to go to water, although high on structure, has solved its water troubles by casing off the upper oil and gas pay and water horizon by setting a string of 5 3/16-inch casing at 2874 feet. This well made an initial flow of 2002 barrels of 29 degree gravity oil on March 25, 1927, from pay at 2824-42 feet. It was deepened lately, and began making pipe line oil after setting the new string of casing below the upper pay, and early this week was flowing 450 barrels of pipe line oil while drilling slowly at 2950 feet.

Another extension to the northwest side of the Yates field structure was made during the past week when the Phillips Petroleum Company's Smith-Monroe 1, section 39, began flowing by heads from regular lime pay at 1319-50 feet after topping the lime horizon at 1221 feet, with a surface elevation of 2450 feet. This well is about three-quarters of a mile west of the nearest production, and was spotted about 1500 feet west of the east line of the lease in order to earn a reasonable proven acreage percentage of the pipe line runs allotted to the field in the event of a producer. Mid-Kansas & Transcontinental's Yates 1-F, section 63, has increased its flow to 130 barrels daily by heads after drilling lime pay at 1152-1225 feet, with a surface elevation of 2474 feet, and definitely proves the field for a short distance to the northeast of established production. The latter interests have made location for Yates 1-G, located 500 feet due west of Yates 1-F.

Pandem Oil Corporation & Gibson Oil Corporation's Pecos River Bed 10, located on the southeast side of the Yates field structure and near the Osage Oil Corporation and T. T. Word's big producer on the Halff land on the Crockett County side of the river, came in last week with an initial flow of 70 barrels of oil per hour after topping pay at 1060 feet, but soon developed one-third water. Osage et al's completed well is still shut in awaiting pipe line connections, with a nearby offset shut down on top of the lime and a third test drilling with rotary.

McMan Oil & Gas Company has contracted to purchase from Pure Oil Company the lease covering sections 25 and 104, located on the southwest and northeast sides of the Yates field, respectively. These two sections contain a total of 1053½ acres, and section 104 is partially proven for big flush production on the west side. The consideration involved has

HENDRICK FIELD OPERATIONS

The status of operations in the Hendrick field, Winkler County, Texas, at the close of last week is shown below by companies:

Company	Locations and Rigs	Drilling Tests	Tests in Big Lime	Completed Wells	Initial Produc'n	Average Produc'n
Amerada Pet. Corp.	..	..	1	..	.....	.....
Arizona Mining & Eng.	..	1	..	..	.....	.....
Atlantic Oil Prod. Co.	5	2	5	4	13,810	*16,205
Atlantic & Collett	..	2	1	..	.....	.....
V. T. Bolin & Co.	1	..	..	..	.....	.....
Cranfill-Reynolds	..	1	1	3	11,825	*5,800
Eastland Oil Co.	..	..	1	..	.....	.....
Gulf Production Co.	2	4	2	6	16,695	*11,630
Humble Oil & Ref. Co.	6	5	1	6	24,200	*16,230
Independent O. & G. Co.	2	2	5	7	25,120	*9,230
Landreth & Roxana	..	1	1	4	13,925	*8,375
Magnolia Pet. Co.	..	1	3	4	11,440	3,790
Marland Oil Co.	3	..	..	..	.....	.....
Joe Maxwell & Turman	..	..	4	4	5,500	4,850
Murchison & Cranfill	3	..	2	4	6,175	1,380
Pure Oil Company	1	3	6	3	10,385	*2,090
Republic Prod. Co.	2	..	3	1	6,000	9,600
Roxana Pet. Corp.	5	2	5	7	47,700	*12,835
Sheldon & Burden	..	..	1	..	.....	.....
Southern Crude & Dixie	3	3	7	7	8,310	*3,805
Southern & Westbrook	1	2	12	7	10,200	*8,665
Texon Oil & Land Co.	1	..	4	1	4,100	*3,675
Totals	35	29	65	68	214,285	118,160
Totals previous week	37	25	66	64	206,860	107,585

*Production partially pinched.

not been made public. These two sections were included in the West Texas acreage that The Texas Company contracted to purchase from Pure last December, but the entire deal fell through.

The Shell Pipe Line Company is now making good progress on laying its 10-inch pipe line from the McCamey district to Healton, Oklahoma, where a connection will be made with its Mid-Continent system, and is expected to have the first 100 miles completed before the end of the present week. Additional crews are being put to work.

The appearance of a small amount of water in Vacuum Oil Company and Hill-Ladd et al's McMillan 2, located 500 feet south of the discovery well owned by the same interests in Runnels County, may result in the well being placed on pump and given a production test before drilling deeper. It was reported last week swabbing and flowing about 100 barrels daily at 2514-16 feet. Humble is running this oil to a tank car rack at Benoit, and paying Mid-Continent gravity scale prices less 15 cents per barrel for railroad transportation. It is the best grade of oil produced in West Texas, and ranges from 44 to 46 gravity.

Phillips Petroleum Company is reported to have agreed to extend its crude gathering system now serving the Noodle Creek field, Jones County, with a tank car rack at Trent, to the new oil producing area uncovered recently four and one-half miles north of the field by Hutson-Weaver and associates. The latter parties have a wildcat producer on the Smith land that is good for about 40 barrels of high gravity oil daily from pay at 2498-2504 feet, with a small show of water.

Lockhart Brothers and associates' Dora Roberts 1 extended the deep lime pay in the Chalk area, located on Howard-Glasscock County line, several locations to the south last week swabbing and flowing 100 barrels oil per hour from pay at 2980-3019 feet. This well is located in the northwest corner of 80-acre lease in section 157, and is to be shut in according to the terms of the shutdown agreement made by operators recently, as no pipe line outlet is available for the oil now available from the deep pay in this area.

Cook Ranch Field Gets Mile Extension

Albany, Texas.—A revival of drilling in the Cook Ranch field, Shackelford County, is promised by the extension of the shallow oil pay more than one mile to the north by Roeser-Pendleton and Marland Oil Company's Cook 1 "A," located near the center of the west line of section 62, E. T. Railroad survey, with a natural flow at 1336-50 feet. The production was estimated above 500 barrels daily, according to Tuesday morning reports from the field.

The original Cook Ranch field was discovered almost two years ago to the day by the above partnership interests, and has since proven to be one of the most prolific shallow oil fields in the Central West Texas district.

New Oil Pool Discovered in Coleman County

Coleman, Texas—Wildcat operations in Coleman County contributed another high gravity oil pool during the past week when M. G. Cheney and Continental Oil Company's W. R. Gardner 1, located in the northeast corner of the B. Ferguson survey No. 748 and several miles south of Coleman, gauged 100 barrels pipe line oil daily from sand pay at 2298-2305 feet. A pipe line connection is being provided by Prairie.

Roth & Faurot, pioneer operators in the county, completed their Stevens 1, located in northwest corner of 213-acre farm, Coleman County School Land survey, with an initial production of 190 barrels of oil during past week from sand pay at 1054-69½ feet. This well is a south offset to the discovery well completed last month by Roth & Faurot on the Jerry Lewis farm. Roth & Faurot are also establishing a new oil producing area on the Sealy-Smith land, section 19, BBB&C survey, with their second test, which is showing for a 50-barrel producer from sand at 2910-35 feet, with a total depth of 2940 feet. The latter well will be given a shot. Number 1 location on this tract was completed several months ago as a gasser in the upper horizon, and is now being deepened to the lower oil pay, while materials have been moved in for a third test.

The Pandem pool, Brown County, was extended about one mile to the south last week when the Clark-Buffalo Oil Company's first test on a tract of 11 acres owned in fee by Brown County, pumped 240 barrels during first 24 hours from regular sand pay at 1096-1102 feet. A number of lease and royalty deals were made on nearby acreage when this semi-wildcat showed for a producer.

Disposition of Yates Oil Involved in Suit

Oil Company filed an application in the Forty-eighth District Court here February 18 for an injunction to restrain the Mid-Kansas Oil & Gas Company from denying the former the right to transport and market its one-half portion of the crude produced from jointly owned leases in the heart of the Yates field, Pecos County, Texas. According to the petition, Transcontinental proposes to proceed with its previously announced plans of building a 10-inch line from the field to Texas City, where a refinery and export terminal is to be erected, but Mid-Kansas is claiming the right to market all the oil produced from the joint property through its interpretation of the contract existing between the two concerns.

Transcontinental originally obtained the lease on the block of about 11,000 acres involved in the above suit, and interested Mid-Kansas in taking over the block in 1926 on a drilling agreement. Mid-Kansas made the first location September 6, 1926, and the first test discovered oil on the Yates structure on October 29, 1926. Development that followed has proved the field for approximately 14,764 acres of oil producing area and of this amount Transcontinental and Mid-Kansas are credited with having approximately 5163 acres, with 56 producing wells. One well gauged 2043.9 barrels of 30 degree gravity oil on a 45-minute gauge November 15, 1927, or at a rate of about 65,000 barrels daily, and other completions made by the joint owners have been up to the average for the field, thus giving them a big potential daily output. However, actual production is being restricted in accordance with pipe line proration agreement. Pipe line runs from the Mid-Kansas-Transcontinental's Yates field leases averaged 17,700 barrels daily last week, as compared to a total of 49,165 barrels daily for the entire field.

Since no date has been set for the hearing of the application made by Transcontinental, considerable time will elapse before final decision is made by the courts.

Three Wells Completed On Burbank East Edge

Tulsa—Three new wells last week added aproximately 2000 barrels initial production to newly developed area along the east edge of Burbank field. Carter Oil Company's No. 5, in the northeast of the southeast of the southeast Section 3-26-6, flowed 392 barrels natural in 17 hours February 14, 38 gravity oil, from 2839-92 feet. Kewanee Oil Company's No. 7, in the northeast of the northwest of the northeast of Section 28-27-6, flowed natural 62 barrels an hour from 2920-95 feet on the following day, running the total production of that lease to 4500 barrels from six wells. Phillips Petroleum Company's No. 7, in the northwest of the southeast of Section 17-27-6, flowed 600 barrels in 16 hours, 38 gravity oil, from 2885-2951 feet.

In the northeast of the southwest of Section 22-24-7, on the U. S. Naval Reserve of Osage County, southeast of Burbank field, Kay County Gas Company's No. 2 made two flows by heads in two days, February 15 and 16, from 2834-39 feet.

Test for Shale Oil

Casper, Wyo.—A new area in the Salt Creek field district is being tested for shale oil by Andrews et al. Location is in the southwest of Section 3-39-79, on the west side of the field, just south of the Duthie properties. It is about 800 feet from the old Hertzman 3 which had a very good production for some time, and then settled down to 200 barrels per day until the rig was destroyed by fire. Then the casing fell into the well, and production hasn't amounted to much since. Production in the new well is expected at 2000 to 2800 feet.

Clark & Cowden, independent producers with headquarters in Oklahoma City, have recently opened offices at 303 Cosden Building, Tulsa, with the purpose of expanding their operations, which formerly have been confined mainly to Southern Oklahoma.

West Texas Production

CRANE COUNTY

	Producing Wells	Daily Average Produc'n
Church & Fields—		
Simms Oil Co. & Atlantic Oil Prod. Co...	31	14,525
Prairie Oil & Gas Co.	11	11,880
Landreth Production Corp.	16	9,065
Tidal Oil Co. & Turman-Maxwell	24	7,605
Humble Oil & Refining Co.	13	5,030
Eastland Oil Co. & Collett-O'Keefe	8	4,460
Magnolia Petroleum Company	33	4,025
Pecos Oil Co.	15	4,065
Magnolia Petroleum Co.	33	4,025
Independent Oil & Gas Co.	7	2,185
Gulf Production Co.	10	1,515
Church-Fields & Weekly	3	1,245
Geo. Church & Bob Fields	2	240
The Texas Co.	2	230
Stidham & Thrasher	1	15
Totals	176	66,085
Gulf-McElroy—		
Gulf Production Co.	57	18,255
Gulf-Waddell—		
Gulf Production Company	1	25
Marland-Hughes—		
Marland Oil Co.	15	535
The Texas Co.	9	220
McMan Oil & Gas Co.	2	70
Independent Oil & Gas Co.	1	10
Totals	27	835
Totals for Crane County	261	85,200

UPTON COUNTY

Texas Pacific Coal & Oil Co.	17	2,260
Roxana Petroleum Corp.	36	1,935
Marland Oil Company	70	1,855
Dixie Oil Company	36	1,825
Prairie Oil & Gas Co.	8	1,300
Gulf Production Co.	15	1,290
The Texas Co.	22	1,005
Humble Oil & Refining Co.	10	830
Independent Oil & Gas Co.	26	600
Champlin Refining Co.	3	485
Orient Oil Operating Co.	2	365
Amerada Petroleum Corp.	6	285
Sun Oil Co.	10	155
Snowden & McSweeney	1	145
Wentz Oil Corp.	3	140
Republic Prod. Co. & Marland Oil Co.	6	90
Tidal Oil Co.	3	80
Atlantic Oil Producing Co.	1	60
Pure Oil Co.	1	50
Bryant & Atlantic Oil Prod. Co.	2	40
McMan Oil & Gas Co.	2	25
Simms Oil Co.	3	25
Texon Oil & Land Co.	1	15
White Eagle Oil & Refining Co.	1	10
Totals	283	14,870

REAGAN COUNTY

Big Lake Oil Co.	128	15,585
Texon Oil & Land Co.	79	5,535
Skelly Oil Co.	1	25
Totals	208	21,145

PECOS COUNTY

Mid-Kansas & Transcontinental Oil Co...	56	*17,700
The California Co.	23	*8,165
Gulf Prod. Co.	14	*6,145
Gulf Prod. Co. (Crockett County)	3	*1,075
Roxana Petroleum Corp.	12	*4,140
Humble Oil & Ref. Co.	10	*3,295
McMan O. & G. Co. & Marland Oil Co...	15	*3,255
Simms Oil Co.	6	*2,965
Marland Oil Co.	10	*975
Red Bank Oil Co.	2	*470
Pandem Oil Corp. & Gibson Oil Corp.	5	*290
Kirby Pet. Co. & Edson Pet. Co.	1	*265
Mazda Oil Corp. & Savoy Oil Co.	1	*235
McMan Oil & Gas Co.	2	*190
Osage Oil Corp. & T. T. Word	1	*....
Totals	161	49,165

WINKLER COUNTY

	Producing Wells	Daily Average Produc'n
Humble Oil & Refining Co.	6	*16,230
Atlantic Oil Producing Co.	5	*16,205
Roxana Petroleum Corp.	9	*12,835
Gulf Production Co.	6	*11,630
Republic Production Co.	1	9,600
Independent Oil & Gas Co.	7	*9,230
Southern Crude & R. A. Westbrook.	8	*8,665
Landreth Prod. Corp. & Roxana	5	*8,375
Cranfill-Reynolds, Inc.	3	*5,800
Joe Maxwell & L. C. Turman	4	4,850
Southern Crude & Dixie Oil Co.	8	*3,805
Magnolia Petroleum Co.	5	3,790
Texon Oil & Land Co.	2	*3,675
Pure Oil Co.	3	*2,090
Murchison & Cranfill Bros. Oil Co.	4	1,380
Totals	77	118,180

HOWARD COUNTY

Magnolia Petroleum Co.	46	*1,345
Marland Oil Co.	35	1,185
Sweeney & Henry	3	410
Pure Oil Co.	4	330
Lockhart & Co.	8	*130
Bristow & Merrick	4	120
Coyle-Concord Oil Co.	3	115
F-H-E Oil Co.	2	75
Godley Oil & Gas Co.	1	65
Mid-West Exploration Co.	2	50
Merrick & Lamb	2	45
Ward Oil Co.	1	45
Humble Oil & Refining Co.	2	40
Tate-Tubbs & Bert Weekly	2	40
Tidal Oil Co.	2	40
Marland Oil Co. & Group 1 Oil Corp.	1	25
Comet Petroleum Co.	2	15
Owen-Sloan Oil Co.	2	*15
Gulf Production Co.	2	10
Schermerhorn Oil Co.	1	*....
Totals	124	4,100

JONES COUNTY

Phillips Petroleum Co.	13	815
Marland Oil Co.	3	335
Mid-West Exploration Co.	4	110
Hutson-Weaver et al.	1	20
Stebbins Oil & Gasoline Co.	1	15
Totals	22	1,295

MITCHELL COUNTY

The California Co.	95	2,495
Magnolia Petroleum Co.	22	465
Atlantic Oil Prod. Co.	8	185
Eastland Oil Co. et al.	9	160
Tidal Oil Co.	2	30
Fred Carey et al.	1	20
Totals	137	3,355

CROCKETT COUNTY

Humble O. & R. Co. & Marland Oil Co...	12	555
Gulf Production Co.	6	360
Cushing Ref. & Gasoline Co.	2	345
Taylor-Link Oil Co. & Kirby Pet. Co.	1	340
E. L. Smith Oil Co.	5	200
Pecos Oil Co.	3	125
Republic Prod. Co.	2	100
Roxana Petroleum Corp.	1	15
C. A. Jones et al.	1	....
Totals	33	2,040

FISHER COUNTY

The Texas Co.	1	235

LOVING COUNTY

Lockhart & Co. et al.	2	130

RUNNELS COUNTY

Vacuum Oil Co. & Hill-Ladd	2	75

SCURRY COUNTY

The Northwest Co.	5	50

ECTOR COUNTY

The Texas Co. & J. S. Cosden	1	15
Totals for all fields	1,317	299,855
Totals for all fields previous week	1,301	289,115

*Production partially pinched.

Palmer Corporation's Well Looks Encouraging

SHREVEPORT, La.—Completion of the Palmer Corporation's Robinson well, in section 26-23-12, North Bossier Parish, as a flowing oil well, has resulted in considerable attention being directed to this area, and again brings up the long discussed possibilities of this section of the State as an oil producing territory. It will be remembered that this section was the center of interest last year as the result of several favorable showings in wells completed in a formation that was then thought to be productive of gas only, and which has since yielded numerous large gas producers. The absence of any further showings of oil in these wells led to the belief that the field would never be developed into a commercial oil area, and this thought has persisted throughout the past several months of activity, during which time the gas producing horizon has been extended several miles toward the southeast.

There have been numerous wells drilled in the Carterville field which showed varying quantities of oil for a short time, but none have continued to flow for as long a period as has the Palmer Corporation's Robinson No. 1. This well was drilled to 3065 feet, where the final string of casing was set above the cap rock that overlies the so-called gas sand and then drilling continued for a distance of three feet below the casing seat, and three inches into the cap rock. The drill bit was then pulled and the well flowed at the rate of approximately 300 barrels a day. It flowed at this rate for a period of about three hours, and then bridged over. After the bridge was knocked out the well came in again flowing about 3000 barrels of fluid, a small per cent of which was drilling mud. After flowing for three hours, the well sanded up again and upon being knocked out for the second time, responded with a flow of 2000 barrels of pipe line oil, gravity 40½ degrees at a temperature of 74, through one four-inch flow line with the gate valve only partially cracked. It flowed in this manner for a period of approximately 12 hours, when it bridged over for the third time. It has repeated this performance since its completion, never flowing for longer than a 12-hour period, and is now standing idle pending the construction of storage pits into which to flow the production.

This well is located in the center of the northwest quarter of the northeast quarter of section 26-23-12, immediately between the older producing part of the field and the only recently developed larger gas producers farther southeast. It will be noted that there is a gas well located in the center of the 40-acre tract which adjoins this tract on the south, and this well was completed at about the same sub-sea level depth as was the Palmer Corporation's well. During recent months, the area lying directly east of this part of the field has been found to be very good gas acreage, and several large wells have been brought in in this area, including The Texas Company's Peyton 1, located in the southwest corner of section 30-23-11, the adjoining section to section 25-23-12, which was brought in with an initial production of around 50 million cubic feet of dry gas from the regular producing depth. This well is about two miles southeast of the Palmer well. A notable feature of this section of the field is the absence of salt water in the sand that has been found to be saturated in the wells farther northwest, and at the same subsea level depth.

Due to the fact that the Palmer's well blew in unexpectedly, no liner has been set, and this may be the cause of the well's repeated sanding over. However, the continued presence of mud in the oil has led to the belief that the casing seat may have given away at the time the plug was drilled in the six-inch casing. During the time that it has flowed it has produced approximately 4000 barrels fluid, the greater part of which is oil, that is now being held in earthen storage pits. No arrangements have yet been made to treat out this oil as there is no pipe line available. The nearest steel storage available is a 2500 barrel tank owned by the Atlantic Oil Producing Company, into which they are storing the small amount of oil production from their L. & A. No. 2 well, and this tank is located a distance of about two miles away. Should the well continue to flow oil when it is again brought back in, a line will probably be strung to this tank, since it is the one means for disposing of the production.

The Natural Gas & Fuel Corporation has encountered a serious problem in connection with its work of killing the wild gas crater in Thompson A-1, in section 21-16-6e, Richland Gas field. One of the two relief wells that are being drilled in an effort to kill the gas flow in the cratered well blew out through the surface casing last week, at 290 feet, thereby increasing the hazards of the work. There is a very good possibility that both wells will now unite in forming an even larger crater that will be harder to control. This relief well has been abandoned and the rig will be moved to another location for the drilling of the second relief well, since it was impossible to stem the flow of the wild well which was throwing mud and water half way up the derrick through the 15-inch surface casing.

Several large gas wells were successfully brought in in this field during the week, adding 167 million cubic feet of gas to the total production of the field. The Moody and Seagraves interests completed two wells, both of which produced in excess of 50 million feet of gas, in sections 18 and 21, of township 16, range 6 east, and the Ruston Drilling Company brought in its Sartor No. 1, located in section 17-16-6e, with an initial production of 55 million cubic feet. Activity in this field continues at about the same pace that has been maintained during the past five months, with indications that a large amount of drilling will be carried on for a much longer period.

Nothing of importance was reported from the wildcat section of the State. In Bienville Parish, Edwin J. Forrest made a Halliburton test in his Perritt No. 1 wildcat, at 3007 feet, which yielded only salt water, with no show of oil or gas. Two deep wells were abandoned in the Pine Island field, Caddo Parish, during the week, both having failed to develop production in the deeper sands. The Ohio Oil Company tested salt water in its Smith No. 25, section 12-21-15, at 4369 feet, to which depth it was plugged back and tested from a total depth of 6010 feet. The Arkansas Natural Gas Company abandoned its Lane No. 1, in section 13-21-15, at 4101 feet, where it was junked and could not be cleaned out. Only one small completion was recorded in this area during the week, The Texas Company's Herndon No 8, well. located in section 14-21-15, which was brought in from 3705 feet, flowing at the rate of 75 barrels a day. Very little drilling activity is being done in this field at the present time, due to the disappointing results of the Trinity wells during recent months.

The Champagnolle field, in Union County, has suffered another setback following the failure of recent tests, and will, apparently, need further prospecting before commercial production is definitely established. The failure of the Magna Production Company's wells, in sections 10 and 11, township 17, range 14, following their favorable showings last week, came as a distinct disappointment to those who maintained faith in the possibilities of the area, despite the several recent failures which it had undergone. This company's Dumas No. 1, located in section 11-17-14, tested dry with only a slight show of gas at 3099 feet, and preparations are now being made to shoot the formation in the hole at 3065 feet, the one experiment that has not been tried in the field to date. Townsend No. 1, located in section 10-17-14, cored salt water sand at 3046 feet, and will be abandoned without further attempts to make a producer. Semroll et al, drilling their Findley No. 1 well, in section 12-17-14, made a test with a patented sand tester at 2683 feet, which resulted in salt water. The Lion Oil & Refining Company's Leverette well, in section 11-16-16, tested salt water at 2765 feet, and the Laurel Oil & Gas Company's Houston No. 1 well, in section 12-16-16, is preparing to bail at 2724 feet, in three feet of sand.

Electric Methods of Applied Geophysics

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THE basic principle of applied geophysics, in so far as it will locate subterranean, commercially valuable deposits or tectonic structures with torsion balances, magnetic or electrical apparatus, is the determining of local disturbances of the gravitational and magnetic earth field or of artificial and natural electric fields, caused by the physical properties of embedded substances, and the interpretation as to the nature, dimension and depth of the subsurface irregularities. These investigations are made at the surface by measuring the characteristic factors of the individual fields, which are generally determined by their components in the space.

Geophysical methods have become today indispensible to practical geology, especially in those regions which have been found by drillings typical of embedded deposits or structures and where the absence of surface indications prevented the discovery of new fields. Of these methods the electric is one of the more important, as practically all subsurface irregularities are of different electric properties in relation to their surroundings. All variations of this method, except that of spontaneous polarization which uses natural electric current of oxidizable ores, apply artificially generated currents which are sent into the ground by means of electrodes, or induced by the magnetic field of wire currents. Measurements of the electric field created in the ground are made at the surface by a systematically distributing stations over the area to be investigated. The readings are calculated, the results graphically illustrated for each station and the distortions of the electric field interpreted after disturbances coming from the magnetic fields of conducting wires have been eliminated by corrections.

For many years attempts have been made to use the conductivity of ores for their discovery. However the first practical method using direct current was introduced by Schlumberger in 1912 and later applied in Sweden and Germany with alternating current. The application of alternating current then led to further perfection and development of new methods.

According to their electric conductivity the known substances are divided into conductors in which electric forces cause a movement of electric quantities (currents) and into non-conductors in the molecules of which electric quantities can be only displaced and directed by the influence of external electric forces (dielectric displacements). The ratio of the current density and the electric field strength is known as specific conductivity and that of the dielectric displacement and the field strength known as dielectric capacity of the substances. Electric fields are, as certain other physical fields, distinguished by points of equal potential, the plane of which is known as equipotential surface and usually being a function of the coordinates of any point xyz in the space: $P=f(xyz)$. The field strength is the gradient of this potential function, its direction standing perpendicular to the equipotential surfaces and being distinguished as the direction in which the change of the rising potential per unit length attains its greatest value. The field strength, as vector, can be divided into components which are mathematically given by the differential quotient of the potential to the respective directions of the components.

The first scientist applying the equipotential surfaces of an electric field for practical explorations was Schlumberger, who based his method upon the known fact that good conductors cause distortions in an electric field and, consequently, deform the equipotential surfaces. He created an electric ground field by sending direct current into the ground by means of two non-polarizable electrodes, and determined the equipotential lines at the surface in such manner that two points of equal potential were first located by means of two hand electrodes connected with a conducting wire and a galvanometer as indicator. These points were obtained by the total absence of current in the galvanometer. This procedure was then repeated for a sufficient number of points until the equipotential lines could be traced. The potential difference between such lines was measured by means of a voltmeter.

The distribution of the equipotential surfaces of an electric homogeneous ground field with direct current is similar to the known corresponding electrostatic field, which is distinguished only by the immovableness of its electric quantities, while in the electric ground field new quantities of electricity are continuously sent to the electrodes from the current source. Instead of the lines of force of electrostatic fields, we now have current lines, the directions of which are given by the orthogonal trajectories of the equipotential surfaces. The potential for any point in the electric ground field is determined by $P = (I/2\pi s).(1/r_1 - 1/r_2)$, where r_1 and r_2 are the distances from the electrodes, I the total current intensity and s the specific conductivity of the ground. By setting P equal to constant and giving constant several values we thus obtain the equation of the equipotential surfaces. For any point xy at the surface the equations of the potential P and the current lines L can be expressed by

$$P=\frac{C}{2}\ln\left(\frac{(x+a)^2+y^2}{(x-a)^2+y^2}\right)$$

$$L=C.\operatorname{artg}\frac{2ay}{x^2+y^2-a^2},$$

when the XY-plane lies in the surface and both electrodes in the X-axis with the distance a to either side of the origin of the coordinate system. The equipotential lines P equal to constant are circles with the radius $R=(2a\sqrt{p}):(p-1)$, their centers lying in the X-axis with the abscissas $d=a(p+1):(p-1)$, when $p=[(x+a)^2+y^2] : [(x-a)^2+y^2]$. The current lines $2ay/(x^2+y^2-a^2)$ are also circles going through the electrodes. Figure 1 illustrates the equipotential lines (solid curves) and current lines (dotted curves) for direct current. The component of the electric field strength in the X-axis has the value

$$E_x=-\frac{dP}{dx}=-C.\left(\frac{a+x}{(a+x)^2+y^2}-\frac{x-a}{(a-x)^2+y^2}\right)$$

and the current density at the point y for x equal to zero therefore

$$i=-2Csa/(y^2+a^2).$$

When a body of different conductivity is present in the underground, the equpotential surfaces of the electric ground field will have their greatest deformations in the vicinity of the body, decreasing gradually to the surface. The change of potential, which a spherical body of the conductivity s_1 lying in a homogeneous ground of the conductivity s_2, produces at the surface is given by the expression

$$\frac{V}{V_n}=1-\frac{k}{r^3};$$

where V is the potential for any point

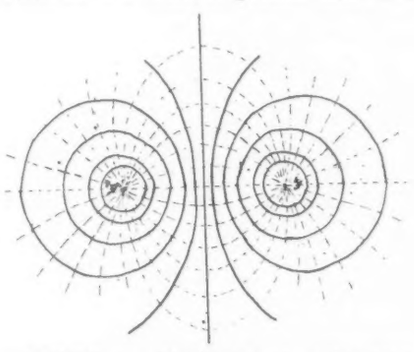


FIGURE 1. *Distribution of equipotential and current lines for direct current.*

in case a disturbing body is present, V_n the normal potential for the same point without disturbance and r the distance of this point from the center of the body. k has the value—$R^3.(s_1-s_2):(2s_1+s_2)$ for conducting bodies with the radius R and the value $R^3.(e-1):(e+2)$ for non-con-

FIGURE 2. *Distortions of equipotential lines to the left, caused by a conductor and, to the right, by a non-conductor.*

ductors with the dielectric constant e. Accordingly, whether the embedded mass is of higher or lower conductivity than the surrounding rocks, the value of k is negative or positive, and consequently the equipotential surfaces deformed either away from or toward the mass (see fig. 2). Further, the equation shows that the change of potential is dependent only upon the ratio of the distance and radius and that of the conductivities. The component of the electric field strength in the direction of the X-axis is

$$E_x = \left(1 - \frac{k}{r^3} + \frac{3kx^2}{r^5}\right).E_o,$$

when E_o is the normal field strength. The values for E_y and E_z in the Y- and Z-axis respectively are obtained from E_x by setting for x^2 the terms xy and xz respectively.

In certain cases it is favorable to determine the curvature (1/c) of the equipotential lines and to compare these values with the theoretical normal ones. It is preferable to determine the curvature for points in only one coordinate axis, for instance, the X-axis. This reduces the calculation of the theoretical values to

$$1/c = -(d^2P/dy^2):(dP/dx).$$

In order to simplify the form of the normal equipotential lines Lundberg, 1918, introduced cable electrodes (line electrodes) instead of the regular ones (point electrodes). By using line electrodes, the normal equipotential lines are straight, paralleling the line electrodes, and permit therefore a more ready observation of smaller deformations. However, in most cases it is not possible to obtain a uniform ground contact with buried cables; in such cases only points of small contact resistance supply the ground chiefly with electricity. Consequently, the parallelity of the equipotential lines can already be disturbed in homogeneous areas as points of good contact are now identical with point electrodes. Such disturbances can be enhanced on rainy days so that false conclusions are easily to be drawn and embedded masses simulated. The equipotential lines method has proven satisfactory only in cases of good conducting ores lying near the surface; in all other cases, and especially for the discovery of salt domes and oil structures, other methods of higher precision must be employed.

When alternating current is used the method of equipotential lines can be applied only in certain favorable cases. The same is to be said about the method which determines the direction of the current lines by means of alternating magnetic fields in applying the usual custom of determining directions of magnetic lines with a coil rotated until the induced current vanishes to zero, in which case the plane of the coil parallels the magnetic lines and stands perpendicular to the current lines. These measurements, however, can be executed and interpreted without difficulty when only one alternating current system is present, but they become complicated and can lead to false interpretation when several fields are present as frequently occur in practical investigations.

In sending alternating current into the ground with grounded electrodes, the following systems are to be considered:

1. The wire current and its magnetic field;
2. The ground current between the electrodes and its magnetic field;
3. The eddy currents, induced by the magnetic field of the wire current, and their magnetic fields;
4. The eddy currents, produced by the magnetic field of the ground current, and their magnetic fields.

These alternating electric and magnetic fields, which depend electro-dynamically upon each other, form a composite electromagnetic field with a complex potential, the calculation of which is an old problem and has been treated by Thomson, Rudenberg, Haberland and others. By applying the equations

$$\frac{1}{r}.\frac{d}{r}(rH) = 2\pi i;$$

$$dE/dr = dH/dt;$$

$$E = i/s = dP/dr;$$

where r is the distance of any point from the conducting wire,
H the magnetic field strength,
i the current density in the ground,
E the electric field strength,
P the potential,
s the specific conductivity of the ground,
we obtain differential equations for the potential, current density and magnetic field strength, the solution of which lead to Bessel's Functions. For the complex potential P at the surface we get the expression

$$P = -\frac{1}{2\pi^2 sfx^2} - \frac{H^2_1(2\pi x\sqrt{2sf}.\sqrt{-j})}{x\sqrt{2sf}},$$

where x is the distance from the wire, f the frequency, H^2_1 the second Hankel's Function and $j = \sqrt{-1}$. The conducting wire lies in the origin of the coordinate system, the X-axis on the surface perpen-

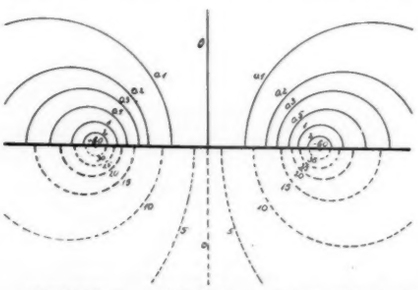


FIGURE 3. *Distribution of potential drop for direct current in homogenous underground (solid curves) and in a better conducting surface stratum (dotted curves).*

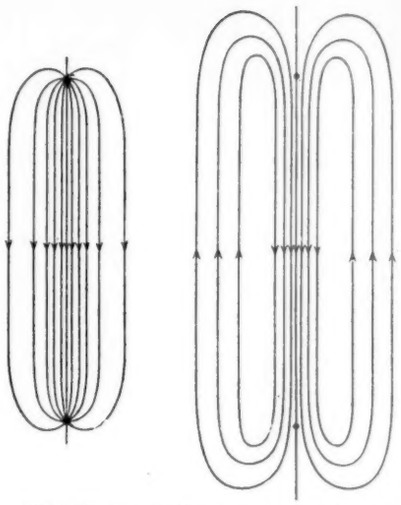


FIGURE 4. *Distribution of alternating current in the ground. To the left, current flow between the electrodes and, to the right, eddy currents, which are induced by the magnetic field of the wire current and displaced 90 degrees in phase to it.*

dicular to the wire and the Y-axis perpendicular to the surface.

The electric field strength E, the current density i and the components H_x and H_y of the magnetic field strength in the X- and Y-axis respectively stand in the following relation to the potential:

$E = 2\pi fIP$; $i = 2\pi fsIP$; $H_x = -j.I.(dP/dy)$; $H_y = +j.I.(dP/dx)$,

where I is the total current intensity.

According to the Hankel Function, the value of the complex potential decreases continuously with the distance from the wire, its imaginary component being dominate in the vicinity of the wire and its real component dominant in greater distances from the wire. As H^2_1 also changes its phase with increasing argument, the potential and likewise the ground current show a continuous change of phase relative to the wire current with growing distances. In setting the complex potential P equal to constant we obtain the equipotential lines for the real and imaginary component of the potential and thereby the magnetic lines of force for the ground current.

The ground current consists of two components: the real one being directed opposite the wire current and of varying phase displacement; its value decreases gradually with distance from the wire. The imaginary component is 90 degrees displaced to the wire current and changes its direction in a certain distance U from the wire (see fig. 5); its highest value being in the vicinity of the wire and then decreasing very rapidly with distance. The magnetic field strength also has two components, one being in phase with the wire current and having the highest value in the vicinity of the wire, then decreasing rapidly in greater distances; the other is displaced in phase to the wire current, being zero in its vicinity, then rising to a maximum and thereafter slowly vanishing. Further, the current density in the vicinity of the wire and the phase displacements increase with higher frequency. However, in a certain fixed distance from the wire, which depends only upon the conductivity and permeability

of the underground, the current density remains constant regardless of frequency changes, while it increases within the radius and decreases without.

Due to the superposition of the various phase displaced magnetic fields it is obvious that the direction of the current lines cannot be determined by a currentless position of the coil, as there exists no one position in which the induced current absolutely vanishes to zero. The

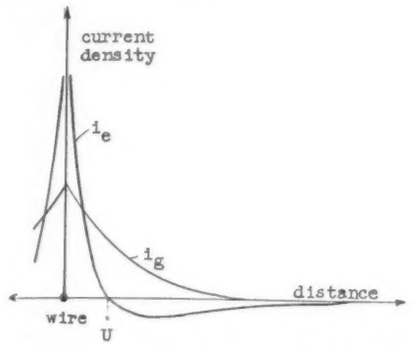


FIGURE 5. *Decrease of alternating current density with growing distance from the wire. Eddy currents reversing their direction at U.*

composite magnetic field results in an elliptic rotating field, the form and axes direction of which depend upon the amplitude, phase displacement and direction of the individual field components. By measuring the intensity of the induced current in several positions of the coil and noting its minimum position, which indicates the direction of only the small axis of the elliptic field, the ellipticity of the composite field can be constructed and the current directions approximated. The common practice of constructing the current direction from the minimum position of the coil only, without the necessary corrections, is therefore incorrect and leads to errors and misinterpretations. In an analogous sense it is generally not possible to exactly trace the equipotential lines, as their direction is continuously changing during one period due to the individual current components differing in phase and direction. Consequently, the resulting elliptic current field in the ground prevents a currentless state in the hand electrodes circuit and permits only a minimum of current when the hand electrodes parallel the small axis of the elliptic field. This minimum position must be corrected by means of the diversion angle of the small axis in order to get the real equipotential lines of the main current component. The diversion angle is a function of the amplitude, phase displacement and direction of the current components of the composite field and can, in certain cases, be approximately determined by measuring the current intensity around one hand electrode.

When embedded masses are present which produce their own eddy currents, the electric conditions become so complicated that often it is quite impossible to determine the equipotential lines or the direction of the magnetic lines. On the other hand, in case of good conducting underground, such as moist districts, these lines can frequently be traced without difficulty because, under such conditions, the real current component attains a higher numerical value, while the imaginary one diminishes to such small amount that it is no longer indicated in the receiving sets.

Layers of capacitive or inductive reactance also cause disturbances in amplitude and phase of the potential and change the direction of its gradient consecutively during one period, producing an elliptic field which again leaves a minimum of induced current in the coil or hand electrodes circuit.

Since special measurements and corrections are necessary to get the real direction of equipotential and magnetic lines, it is advisable to abandon these methods and to measure the total intensity of the electromagnetic field absolutely or relatively and its phase displacements relative to the wire current or between consecutive stations. By comparing these measured values with the normal theoretical ones, we thus obtain a quantitative measure of the field distortions which enables us to accurately interpret the measurements as to the location and nature of subsurface irregularities.

In order to simplify the measurements, observations have been made behind the electrodes to eliminate the magnetic induction of the wire current and disturbances of the eddy currents. However, these eliminations can be only partially obtained; on the other hand, the current density behind the electrodes decreases so rapidly with growing distance that only extensive masses in close proximity to the surface and of sufficient varying conductivity produce noticeable current disturbances to be sufficiently indicated at the surface. Attempts have also been made to lay the conducting wire in a large bow to the electrodes instead of a straight line (base line) between them in order to lessen the magnetic influence of the wire current. However, this arrangement results in an unsymmetrical distribution of the wire field and the eddy currents to the base line and merely complicates the necessary corrections. It is, therefore, advisable to lay the wire in a straight line between the electrodes, for the purpose of a uniform distribution of the induction effects to either side of the base line and to measure in profiles between the electrodes. With this arrangement it is further possible to discover good conducting layers even when they are below an insulating stratum and not to be reached by the ground flow between the electrodes, as in this case the magnetic field of the conducting wire will reach and induce eddy currents in them. A variation of the electric methods has been developed which uses closed wire circuits instead of the grounded electrodes. In this case only eddy currents are generated in the ground by the magnetic field of the wire current which are especially developed in formations of higher conductivity (ores, salt water, etc.) The intensity and phase displacements of these currents are measured at the surface by means of their own magnetic field. This method is particularly favorable in rocky and dry districts, where the grounding of electrodes is difficult and the subsurface of very small conductivity or of insulating character. In all cases where only eddy currents shall be utilized, the form and position of the loop is immaterial and may be a circle, rectangle, triangle or a coil in

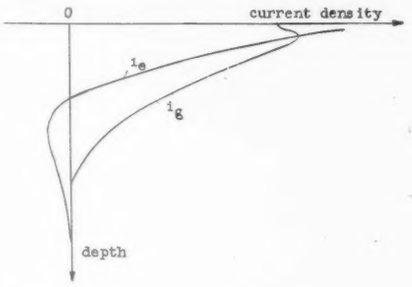


FIGURE 6. *Decrease of alternating current density with growing depth.*

a vertical or horizontal position. The function of the current flow in the ground when loop or coil lies horizontally is

$$L = (jfsFI).\,[(1/r) - jfs2\pi.\ln r,]$$

where $j = \sqrt{-1}$, f the frequency, s the conductivity, F the total winding plane, I the wire current and r the distance of any point from the center of the loop as the origin of the co-ordinate system. According to this equation, the current lines encircle the origin. When loop or coil stands vertically with its plane in the direction of the X-axis of the co-ordinate system, the current function is given by

$$L = -(jsfFI).[(x/r^2.) - jsf2\pi.(x/r)]$$
$$= sfFI.\ [(x/r^2).\sin(ft) - sf2\pi.(x/r).\cos(ft)].$$

The equation L equal to constant gives the current lines at any time. At the times $ft = \pi/2,\ 3\pi/2$ . . . the current lines are represented by the equation $x/r^2 =$ constant; i.e. by circles centering in the X-axis and touching the Y-axis in the origin. At the times $ft = 0, \pi,$ . . . the current lines are represented by $x/r =$ constant; i.e., each current line consists of two straight lines (asymptotes) converging at the origin, the angle of which being halved by the X-axis. During one period the current lines oscillate therefore between the above circles and these asymptotes.

An important question is that of resistance and extent of direct and alternating current in the ground. When direct current is used it has to overcome the spreading resistance of the electrodes which is caused by the concentrated radial current flow in the vicinity of the electrodes. This spreading resistance depends upon the form and depth of the electrodes and is proportional with the specific earth resistance. Between the electrodes the current spreads to such extensive width and depth that this zone is of negligible resistance and of minimum potential drop. However, in the presence of a higher conducting surface stratum a more outward than downward spread of current takes place, with the result that the potential drop does not decrease so rapidly with distance from the electrodes. Figure 3 illustrates the normal potential drop in case of a homogeneous underground and surface stratum of higher conductivity.

In applying alternating current, a further ohmic resistance besides the spread-

ing resistance exists, which depends upon the frequency and is given by $R = \pi^2 fl$, where f is the frequency and l the distance between the electrodes. This additional resistance is independent of the specific earth resistance; a variation of the latter changes only the current section in such manner that R ever maintains a constant value. The inductive re-

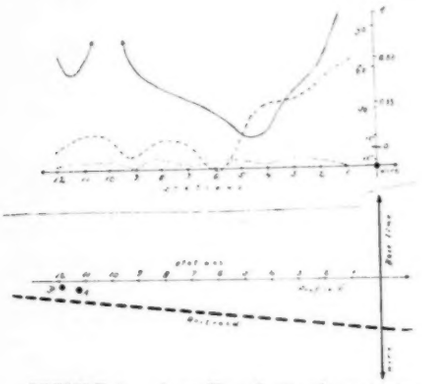


FIGURE 7. *A profile of electric measurements at Pierce Junction, Texas.*

actance of the ground current is proportional with $\ln \sqrt{s/f}$. The spread of alternating current in the ground depends upon the ohmic earth resistance and the self inductance which forces the current lines to the surface and conducting wire, thus reducing the magnetic energy of the closed current system between wire and ground to a minimum. However, due to the high earth resistance and with audio frequency this is obtained to only a certain degree; but the higher frequency the more this is enhanced. The spread of the current to either side of the conducting wire can be approximately determined by $r = 5/2\pi \sqrt{f/s}$. This gives for different frequencies f and the earth resistance $s = 10^{13}$ cgs (10^4 Ohm) the following values in meters

Frequency	50	500	5,000	50,000
Spread	3,550m	1,120m	355m	110m

The distance from the wire in which the induced eddy currents reverse their direction is approximately $U = \sqrt{s/4\pi^2 f}$. (See Fig. 5). Within this distance the underground contains nearly two-thirds of the total current flow. Figure 4 illustrates the distribution of the current (i_g) between the electrodes and that of the eddy currents (i_e). The decrease of current density of i_g and i_e with growing distance from the wire is shown in Figure 5. In the case of direct current its extent depends upon the distance between the electrodes and almost doubles this distance.

The depth to which alternating current penetrates the earth depends upon the frequency and earth resistance when the electrodes are at sufficient distance from each other. The depth at which the ground current still has a noticeable intensity can be approximately given by the term $d = \sqrt{s/8\pi^2 f}$. The ratio of the depths d_1 and d_2 obtained with two different frequencies f_1 and f_2 stands therefore in the relation $d_1 : d_2 = \sqrt{f_2} : \sqrt{f_1}$. The following table gives the approximate depth in meters for different frequencies f when the earth resistance has the values $s = 10^{13}$ cgs and $s' = 10^{14}$cgs

Frequency	50	500	5,000	50,000
Depth (s)	500m	160m	50m	16m
Depth (s')	1,500m	500m	160m	50m

Figure 6 illustrates the decrease of current density of i_g and i_e with growing depths.

The foregoing treatise of electric methods in applied geophysics makes apparent that special instruments of highest precision and a thorough electro-physical knowledge are necessary to accurately measure and correctly interpret the distortions of electric ground fields. Only when these conditions have been met will the electric methods be successfully applied.

In Figure 7 one profile of electric measurement executed in January, 1927, by the author with his new apparatus in the salt dome district of Pierce Junction, Texas, is illustrated. It illustrates great disturbances of a non-conducting nature at the stations 12, 11 and 9. In September, 1927, the Associated Oil Company drilled a well (A) 39 feet from station 12 to 4447 feet and secured flush production of about 1800 barrels; the well is now making about 500 barrels daily. In October, 1927, the Leonard well (B) was drilled 77 feet from station 11, and had production of about 500 barrels at 4602 feet.

The other side of the profile shows more extensive indications of the same nature, but drilling has not been started in this part.

Cody Council Opposes Claim Validation

Cody, Wyo.—City council has forwarded resolutions of protest to U. S. Senators Warren and Kendrick and to Congressman Charles E. Winter as well as to the governor, against Senate Bill 767 which, it is said, would validate some old oil placer claims in the Oregon Basin field which would be to the particular benefit of the Ohio Oil Company. Resolutions state that the bill will retard the development of the new Oregon Basin oil field and the town of Cody if it becomes a law. The land involved in the bill is that upon which the old Enalpac Oil Company is said to have made locations under the oil placer mining law before the passage of the present mineral leasing law.

Casper, Wyo.—Recent demand for carbon black from natural gas has been responsible for the full-capacity operation of the Huber Company plant at Lance Creek and the Riverton Company plant at Riverton, Wyoming. Both companies report heavy shipments recently; until the last few weeks the market has been so low as to necessitate the storage of large quantities.

Guy B. Cox, district representative at Fort Worth, for the Blackhawk Manufacturing Company, of Milwaukee, was a recent visitor at Tulsa.

Personal Mention

Jesse A. Ballard, 24-year-old field worker of Drumright, Oklahoma, was last week reported among those killed when the tanker Chuckey exploded February 16 off the coast of Japan. C. M. Ballard, father of Jesse, is now working in the Seminole district, but has made his home at Drumright for the past 12 years.

Otto Kafka of Houston, was confined to his room at the Mayo Hotel, Tulsa, late last week, having been taken ill enroute to Tulsa on business.

Don Lynch and W. T. Lyton, formerly connected with the sales department of the Oil Well Supply Company, Tulsa, have been transferred to the Pittsburg office of the Company.

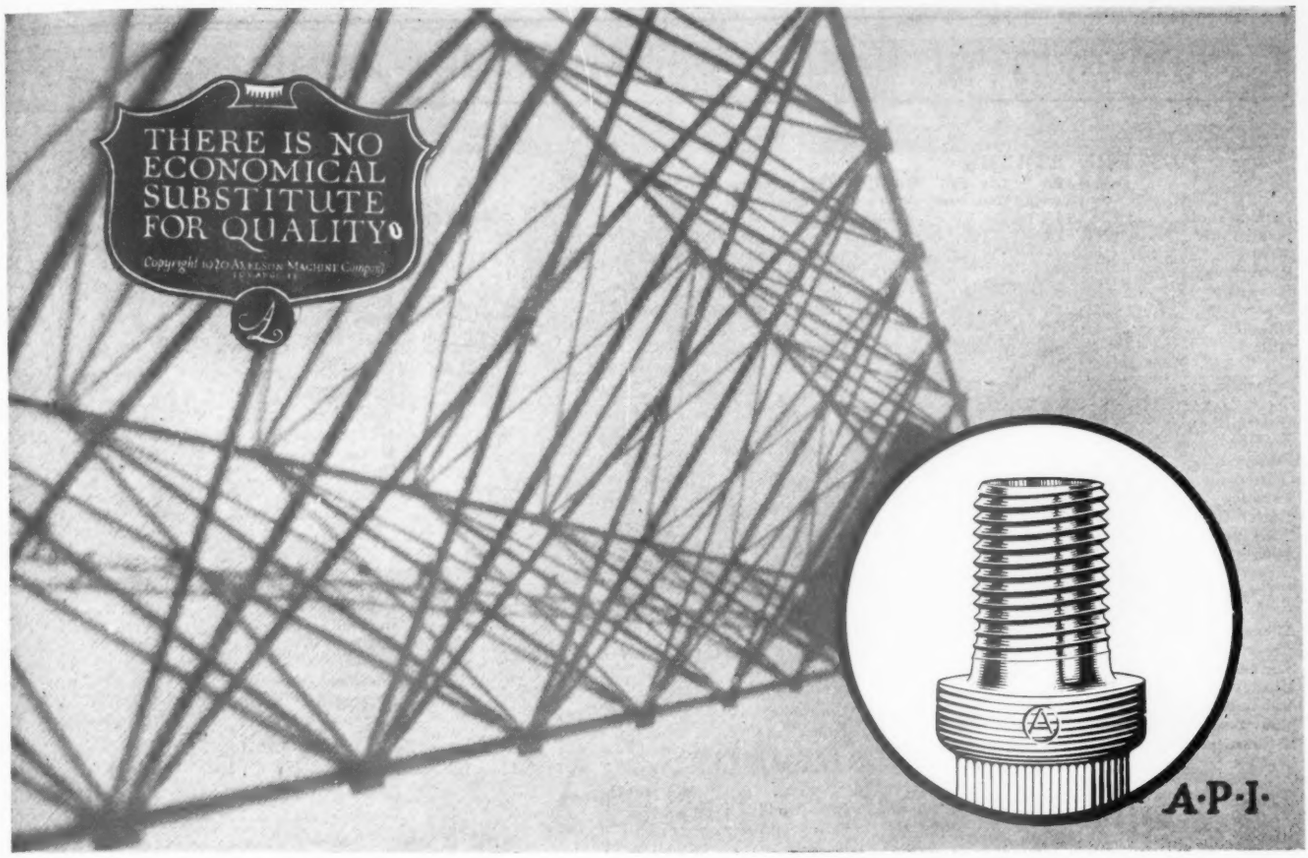
R. C. Shaw of Ponca City, in charge of the Osage district supply stores for the Oil Well Supply Company, and V. J. Water, in charge of the Company's stores in the Wewoka district, have recently returned from a trip to the general offices at Pittsburgh.

Sidney H. Keoughan, president of Continental Oil Company, is reported to be much improved from a recent illness which has kept him confined in a Los Angeles hospital for some months, and he is expected to return soon to his Denver home. Mr. Keoughan left Denver the fore part of January on a business trip to the Pacific coast, and was stricken soon after his arrival in Los Angeles. He underwent two minor operations after which his condition was considered very grave.

George H. Hines of New York City and J. H. Thelen of Great Falls, both directors of the Yellowstone Petroleum Company were on tour of inspection of properties of the Cody Petroleum Company in the Oregon Basin field last week. The Yellowstone Petroleum Company is the holding company for the Ferdig interests, one of which is the Cody Pete.

A. M. Gee, counsel for the Mid-Kansas Oil Company at Tulsa, subsidary of the Ohio Oil Company, visited the latter company's Casper offices this week. Mr. Gee was formerly counsel for the Ohio in the Rocky Mountain district and had his headquarters in Casper.

C. W. DeLancey of the Humble Oil & Refining Company, who has been assistant to "Bink" Manning, general superintendent of drilling and production in the Gulf Coast, has been transferred from Houston to Pyote, and will be drilling superintendent for Humble in that district.



AXELSON SUCKER RODS

Axelson Machine Co.
Sucker Rods, Pull Rods, Plunger Working Barrels, (Pumps) etc.

Beaumont Iron Works Company
Dreadnaught Rotary Equipment, Water-Cooled Drawworks, Pumping Hoists, Traveling Blocks, etc.

Carbic Manufacturing Co.
Acetylene Gas Generators and Welding Equipment.

Donovan Boiler Works
Oil Country Boilers and Tanks.

Frick-Reid Service Belting
Rubber Covered and Friction Surface.

Jensen Bros. Mfg. Co.
Pumping Jacks.

National Transit Pump and Machine Co.
Power and Steam Pumps.

J. P. Ratigan
Grips, Clamps, Beam Hangers.

Joseph Reid Gas Engine Company
Gas and Oil Engines, two and four-cycle, Band Wheel and Direct Drive Pumping Powers.

Whitlock Cordage Co.
Manila Cordage, including Frick-Reid Manila Bull Ropes—same quality for ten years.

Lapweld and Seamless Tubular Goods
Walworth Company
Valves, Fittings and Tools for Steam, Water, Gas, Oil and Air.

Rossendale-Reddaway Company
"Camel Hair" Belting, Belt Clamps.

Engineering Crews
for the installation of Pumping Powers and related equipment.

AXELSON RODS have always set up records of sheer endurance for the world to shoot at. All that is known about steel, including refinements not common knowledge in even the sanctums of metallurgy and heat treatment, is incorporated in the Axelson A. P. I. Sucker Rods now available at Frick-Reid Stores.

FRICK-REID SUPPLY COMPANY

Tulsa, Okla. Pittsburgh, Pa.
West of the Mississippi, Stores Everywhere.
East of the Mississippi, The Frick & Lindsay Co.

Summary of Field Operations for January, 1928

EASTERN STATES

	Completions	Producers	Gas Wells	Failures	Initial Prod
Pennsylvania	123	105	8	10	200
New York	24	24	..	..	65
Michigan	10	6	..	4	228
West Virginia	60	18	33	9	402
Kentucky	55	31	4	20	1,694
Indiana	7	4	..	3	108
Illinois	9	2	..	7	11
Ohio	96	37	37	22	575
Totals	384	227	82	75	3,283

PENNSYLVANIA

Greene	9	4	3	2	42
Bradford	84	81	..	3	104
Butler	5	2	1	2	4
Clarion	9	5	2	2	11
Vanango	10	9	1	..	20
Center-Middle	3	2	1	..	4
Washington	2	1	..	1	5
Allegheny	1	1	..	..	10
Totals	123	105	8	10	200

NEW YORK

Allegany	24	24	..	..	65

MICHIGAN

Saginaw	4	2	..	2	35
Muskegon	2	2	..	..	170
Macomb	1	1	..	..	3
Shiawassee	1	..	..	1	..
Livingstone	1	..	..	1	..
Graitiot	1	1	..	..	20
Totals	10	6	..	4	228

WEST VIRGINIA

Mingo	5	4	1	..	163
Wood	2	1	..	1	100
Clay	2	2	..	..	25
Braxton	1	..	1	..	....
Gilmer	5	2	3	..	34
Cabell	3	..	3	..	....
Boone	6	..	6	..	....
Marion	6	..	4	2	....
Ritchie	7	5	1	1	44
Roane	3	2	1	..	28
Logan	3	..	3	..	....
Marshall	2	..	1	1	....
Pleasants	1	..	..	1	....
Wetzel	2	1	1	..	5
Calhoun	3	..	1	2	....
Lincoln	4	..	4	..	....
Lewis	3	1	2	..	3
Harrison	1	..	1	..	....
Wirt	1	..	..	1	....
Totals	60	18	33	9	402

OHIO

Southeastern—					
Jefferson	2	2	..	..	14
Washington	6	2	1	3	6
Monroe	1	1	..	..	3
Noble	1	..	1	..	..
Morgan	2	..	2	..	..
Central—					
Holmes	8	..	7	1	..
Cuyahoga	12	1	10	1	10
Medina	4	1	1	2	10
Wayne	3	..	2	1	..
Coshocton	4	..	3	1	..
Ashland	5	..	3	2	..
Perry	5	4	..	1	90
Guernsey	2	2	..	..	45
Licking	8	5	..	3	87
Meigs	4	1	3	..	4
Knox	2	..	..	2	..
Starke	1	..	..	1	..
Athens	4	2	1	1	4
Hocking	1	1	..	..	10
Lorain	3	..	3	..	..
Muskingum	1	..	..	1	..
Northwestern—					
Allen	3	3	..	..	110
Seneca	2	1	..	1	10
Ottawa	1	1	..	..	25
Hardin	1	1	..	..	40
Auglaize	2	1	..	1	15
Van Wert	1	1	..	..	2
Sandusky	1	1	..	..	8
Mercer	1	1	..	..	5
Wood	3	3	..	..	27
Hancock	2	2	..	..	50
Totals	96	37	37	22	575

KENTUCKY

Ohio	27	18	..	9	1,409
Daviess	4	2	..	2	250
Estill	8	2	..	6	....
Floyd-Knott	5	..	4	1	....
Johnson-Magoffin	4	3	..	1	20
Wayne	1	1	..	..	2
Warren	4	4	..	..	12
Allen	2	1	..	1	1
Totals	55	31	4	20	1,694

INDIANA

Daviess	1	..	..	1	..
Pike	3	2	..	1	95
Jay	1	..	..	1	..
Gibson	2	2	..	..	13
Totals	7	4	..	3	108

ILLINOIS

Crawford	3	1	..	2	1
Wabash	5	..	..	5	..
Lawrence	1	1	..	..	10
Totals	9	2	..	7	11

MOUNTAIN STATES

Wyoming	8	7	1	..	875
Montana	5	5	..	..	1,092
Colorado	1	..	..	1	....
New Mexico	..	..	..	..	....
Totals	14	12	1	1	1,967

WYOMING

Big Muddy	1	1	..	..	100
Lost Soldier	2	1	1a	..	100
Pedro	1	1	..	..	100
Salt Creek	4	4	..	..	575
Totals	8	7	1	..	875

a—Includes 30,000,000 feet of gas.

MONTANA

Kevin-Sunburst	5	5	..	..	1,092

MOUNTAIN STATES PRODUCTION SUMMARY

WYOMING

Field—	Barrels
Salt Creek	1,298,750
Grass Creek	75,750
Elk Basin	30,400
Big Muddy	83,500
Lost Soldier	83,950
Rock River	79,000
Lance Creek	19,800
Others	93,000
Totals	1,763,400

MONTANA

Cat Creek	55,450
Kevin-Sunburst	274,000
Others	5,350
Totals	343,000

COLORADO

Moffats (Craig)	37,850
Fort Collins	93,500
Florence	27,200
Others	53,400
Totals	211,950

NEW MEXICO

Artesia	41,550
Table Mesa	4,050
Hogback	14,050
Rattlesnake	11,950
Others	4,800
Totals	76,400
Total Mountain States	2,394,750

KANSAS PRODUCTION SUMMARY

Field—	Barrels
Greenwood County	943,350
Florence-Covert	44,600
Peabody-Elbing	116,750
Eldorado-Towanda	441,750
Augusta-Fox Bush	129,500
Rainbow Bend	60,650
Russell	71,100
Churchill	368,900
Oxford	156,200
Others	1,025,000
Total	3,357,800

KANSAS

Butler	6	1	..	5	300
Chase	1	..	..	1	....
Chautauqua	1	..	1	..	....
Coffey	1	..	..	1	....
Cowley	7	2	2	3	30
Dickinson	1	..	..	1	....
Elk	4	1	1	2	20
Ellsworth	2	..	..	2	....
Greenwood	19	11	..	8	1,495
Labette	4	..	..	4	....
Logan	1	..	..	1	....
Lyon	1	..	..	1	....
Marion	8	1	..	7	25
McPherson	1	..	..	1	....
Montgomery	6	1	1	4	200
Russell	1	1	..	..	120
Sewa d	1	..	1	..	....
Sumner	16	11	1	4	6,215
Totals	81	29	7	45	8,405

OKLAHOMA

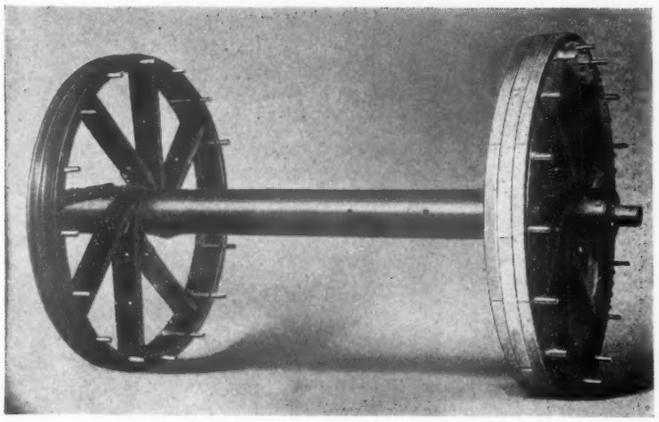
Beckham	4	..	3	1	....
Bryan	1	..	..	1	....
Caddo	1	1	..	..	40
Carter	3	2	..	1	275
Cherokee	1	..	..	1	....
Cleveland	1	..	..	1	....
Cotton	2	..	1	1	....
Creek	17	11	2	4	1,944
Garfield	5	3	..	2	78
Garvin	1	..	..	1	....
Grady	13	1	9	3	125
Grant	2	1	1	..	30
Greer	1	..	..	1	....
Hughes	3	1	1	1	180
Jefferson	2	1	..	1	140
Kay	15	..	6	9	....
Lincoln	1	1	..	..	675
Major	1	..	..	1	....
Muskogee	13	4	1	8	82
Noble	1	..	..	1	....
Okfuskee	3	..	2	1	....
Okmulgee	16	4	4	8	120
Osage	19	12	4	3	6,545
Pawnee	5	2	2	1	32
Pittsburgh	1	..	1	..	....
Pontotoc	13	11	1	1	4,250
Pottawatomie	7	5	1	1	2,830
Seminole	46	28	..	18	12,277
Stephens	15	5	3	7	440
Tulsa	8	3	3	2	50
Wagoner	12	4	1	7	60
Totals	233	100	46	87	29,173

OKLAHOMA PRODUCTION SUMMARY

Field—	Barrels
North Braman	96,050
South Braman	57,500
Blackwell	118,850
Hubbard	88,600
Thomas	54,500
Tonkawa	466,200
Garber	310,550
Burbank	1,171,500
Osage	921,250
Watchorn	36,700
Cushing	652,750
Yale-Jennings	279,350
Davenport	71,950
Bristow-Slick	760,700
North Okmulgee	494,150
Lyons-Deaner	194,800
Stroud	34,550
Cromwell	323,450
Papoose	164,000
Wewoka	267,850
Seminole	1,738,400
Bowlegs	3,116,000
Little River	1,134,850
Earlsboro	3,835,900
Searight	614,200
Duncan	208,250
Graham	190,450
Fox	56,850
Hewitt	278,700
Healdton	449,900
Scholem-Alechem	397,650
Others	2,352,750
Totals	20,939,150

MOORE PUMPING BULL WHEEL

A New Light Type BULL WHEEL



AN economical steel bull wheel for shallow drilling, cleaning out and pumping service. Being lower in price than the standard wheel, the Moore Steel Pumping Bull Wheel reduces the investment in rig equipment over a producing well.

After drilling is completed, the standard wheel may be replaced with this light type wheel. It is not necessary to change the bull wheel posts as the shaft is the same length and has the same size trunnions as the standard wheel.

SPECIFICATIONS

7′ 6″ diameter. Steel shaft, 13″ @ 48.73 lbs., heated and shrunk on the gudgeons and securely riveted in place. Gudgeons 13′ 6″ shoulder to shoulder. Trunnions 5″ diameter x 6″. 8-spoke wheels with 9″ brake face and rolled steel, double V groove tug rim. Hickory hand pins. Moore wing plate construction with tangent spokes, exerting direct push on the shaft. Corners of spokes are trimmed for easy assembly.

World Wide Service for Twenty Years

LEE C. MOORE & CO., *Inc.* PITTSBURGH · TULSA

Established 1907

DALLAS, TEXAS HOUSTON, TEXAS WICHITA FALLS, TEXAS BORGER, TEXAS PARKERSBURG, W. VA.
CASPER, WYO. SHREVEPORT, LA. EL DORADO, KAN. EL DORADO, ARK.

CALIFORNIA PRODUCTION SUMMARY

Field—	Barrels
Long Beach	3,579,000
Midway-Sunset	2,499,000
Huntington Beach	1,872,000
Ventura Avenue	1,622,000
Seal Beach	1,283,000
Santa Fe Springs	1,192,000
Inglewood	967,000
Torrance	620,000
Dominguez	410,000
Rosecrans	248,000
Others	4,844,000
Total	19,136,400

CALIFORNIA

Field—	Completions	Producers	Gas Wells	Failures	Initial Prod
Athens-RoseCrans	1	..	..	1	*
Alamitos Heights	..	..	..	..	....
Baldwin-Hills Inglewood	..	..	..	..	....
Belridge	2	2	..	..	275
Brea-Richfield	2	2	..	..	550
Cat Canyon	1	1	..	..	400
Dominguez	2	2	..	..	90
Elk Hills	..	..	..	..	....
Huntington Beach	6	6	..	..	1,965
Kern Front	4	4	..	..	850
Long Beach	7	7	..	..	13,300
Midway	2	2	..	..	550
Poso Creek	..	..	..	..	....
Rincon	5	5	..	..	3,075
Santa Fe Springs	1	..	..	1	....
Seal Beach	6	2	..	4	1,475
Sunset	1	1	..	..	100
Torrance	..	..	..	..	....
Ventura Avenue	2	2	..	..	3,500
Wildcats	3	..	..	3	....
Totals	45	36	..	9	26,130

ARKANSAS

Field—	Completions	Producers	Gas Wells	Failures	Initial Prod.	Monthly Prod
Bradley	..	..	..	..	....	....
Champagnolle	..	..	..	..	....	18,600
El Dorado	..	..	..	..	....	165,600
Nevada	2	2	..	..	75	87,000
Lisbon	..	..	..	..	....	77,550
Smackover	9	5	4a	..	155	2,405,500
Stephens	..	..	..	..	....	490,995
Urbana-Lawson	..	..	..	..	....	....
Others	..	..	..	..	....	3,100
Wildcats	14	..	..	14	....	....
Totals	25	7	4	14	230	3,248,045

a—Includes 40,000,000 feet of gas.

LOUISIANA

Field—	Completions	Producers	Gas Wells	Failures	Initial Prod.	Monthly Prod
Bellevue	..	..	..	..	....	31,700
Bossier Par.	6	..	6a	..	....	....
Caddo Par.	13	9	4b	..	1,060	479,250
Cotton Valley	..	..	..	..	....	138,650
De Soto-Red River	2	2	..	..	93	130,000
Elm Grove	..	..	..	..	....	18,950
Haynesville	..	..	..	..	....	196.350
Homer	..	..	..	..	....	136,050
La Salle Par.	..	..	..	..	....	....
Monroe	..	..	..	..	....	....
Ouachita Par.	5	..	5c	..	....	....
Pleasant Hill	..	..	..	..	....	24,000
Red River	..	..	..	..	....	....
Richland	3	1	2d	..	49	....
Sabine Par.	2	1	..	1	10	....
Spring Hill	..	..	..	..	....	....
Union Par.	..	..	..	..	....	....
Urania	..	..	..	..	....	248,600
Webster Par.	3	1	2e	..	15	....
Wildcats	13	..	..	13	....	....
Totals	47	14	19	14	1,227	1,403,550
La. Gulf Coast	14	7	..	7	2,932	462,800
La. Totals	51	21	19	21	4,159	1,866,350

a—Includes 56,500,000 feet of gas.
b—Includes 12,500,000 feet of gas.
c—Includes 49,500,000 feet of gas.
d—Includes 95,000,000 feet of gas.
e—Includes 7,500,000 feet of gas.

LOUISIANA GULF COAST

Field—	Completions	Producers	Gas Wells	Failures	Initial Prod.	Monthly Prod.
Eagle Point	..	..	..	..	..	a
Edgerly	2	1	..	1	7	54,450
Evangeline	3	2	..	1	125	33,950
Lockport	4	2	..	2	970	152,300
Starks District	1	..	..	1	..	a
Sweet Lake	..	..	..	..	..	a
Vinton	1	..	..	1	..	141,500
Others	..	..	..	..	..	80,600
Wildcats	3	2	..	1	1,830	....
Totals	14	7	..	7	2,932	462,800

a—Production included in "Others."

TEXAS

Texas Recapitulation

Field—	Completions	Producers	Gas Wells	Failures	Initial Prod.	Monthly Prod
Panhandle	21	13	5	3	8,515	2,379,600
West Texas	78	65	..	13	289,465	8,322,250
Central- West Texas	106	47	9	50	4,512	1,715,000
East-Central Texas	..	..	..	..	....	801,900
North Texas	85	48	..	37	2,655	2,273,100
East Texas	21	2	11	8	30	.....
Southwest Texas	16	4	5	7	600	723,300
Gulf Coast	43	29	..	14	17,026	3,425,300
Totals	370	208	30	132	322,803	19,640,450

SOUTHWEST TEXAS

Field—	Completions	Producers	Gas Wells	Failures	Initial Prod.	Monthly Prod
Bee County	1	..	..	1	....	.....
Caldwell Co.	2	..	..	2	....	.....
Dale	..	..	..	..	....	14,250
Duval Co.	1	..	1†	..	....	.....
Jim Hogg County	6	3	..	3	575	.....
Kleberg Co	..	..	..	..	....	.....
Laredo District	..	..	..	..	....	214,100
Live Oak County	1	..	1‡	..	....	.....
Luling	1	1	..	..	25	408,150
Lytton Springs	..	..	..	..	....	49,600
Medina County	..	..	..	..	....	.....
Somerset	..	..	..	..	....	24,800
*Others	..	..	..	..	....	12,400
Webb Co.	4	..	3§	1	....	.....
Wildcats	..	..	..	..	....	.....
Totals	16	4	5	7	600	723,300

Includes Medina, Kleberg and Duval Counties.
†Includes 30,000,000 feet of gas.
‡Includes 40,000,000 feet of gas.
§Includes 105,000,000 feet of gas.

TEXAS PANHANDLE

Field—	Completions	Producers	Gas Wells	Failures	Initial Prod.	Monthly Prod
Carson Co.	2	..	2*	..	....	235,650
Gray Co.	9	9	..	..	7,795	534,800
Hale Co.	1	..	..	1	....	.....
Hutchinson County	5	3	1†	1	660	1,570,000
Lamb Co.	1	..	..	1	....	.....
Wheeler County	2	1	1‡	..	60	37,600
Potter Co.	1	..	1§	..	....	.....
Others	..	..	..	..	....	1,550
Totals	21	13	5	3	8,515	2,379,600

*Includes 45,000,000 feet of gas.
†Includes 4,000,000 feet of gas.
‡Includes 59,000,000 feet of gas.
§Includes 10,000,000 feet of gas.

WEST TEXAS

Field—	Completions	Producers	Gas Wells	Failures	Initial Prod.	Monthly Prod
Crane Co.	6	6	..	..	4,590	*
Crockett County	..	..	..	..	....	81,550
Howard Co.	8	8	..	..	810	206,750
Jones Co.	1	1	..	..	75	38,600
Mitchell-Scurry Counties	1	1	..	..	100	101,200
Pecos Co.	32	32	..	..	233,100	1,562,950
Reagan Co.	5	5	..	..	1,040	692,100
Upton Co.	4	3	..	1	165	3,191,600
Winkler Co.	9	9	..	..	49,585	2,379,450
Others	..	..	..	..	....	68,050
Wildcats	12	..	..	12	....	.....
Totals	78	65	..	13	289,465	8,322,250

EAST CENTRAL TEXAS

Field—	Completions	Producers	Gas Wells	Failures	Initial Prod.	Monthly Prod
Corsicana-Powell	..	..	..	..	....	393,500
Currie	..	..	..	..	....	18,600
Mexia	..	..	..	..	....	249,000
Nigger Creek and Cedar Creek	..	..	..	..	....	55,450
Richland	..	..	..	..	....	20,350
Wortham	..	..	..	..	....	65,000
Wildcats	..	..	..	..	....	.....
Totals	..	..	..	..	....	801,900

EAST TEXAS

Field—	Completions	Producers	Gas Wells	Failures	Initial Prod.	Monthly Prod
Harrison County	7	1	6*	..		20
Panola County	6	1	5¶	..		10
Marion County	..	..	..	..	..	....
Wildcats	8	..	..	8		....
Totals	21	2	11	8		30

*Includes 23,500,000 feet of gas.
¶Includes 19,000,000 feet of gas.

GULF COAST

Field—	Completions	Producers	Gas Wells	Failures	Initial Prod.	Monthly Prod.
Barbers Hill	1	1	..	..	100	27,500
Batson	2	2	..	..	300	40,300
Big Creek	1	..	..	1	....	62,300
Blue Ridge	2	2	..	..	890	122,700
Boling	..	..	..	..	....	65,500
Damon Mound	..	..	..	..	....	27,050
Goose Cre'k	3	3	..	..	375	229,100
High Isld.	..	..	..	..	....	*
Hull	7	3	..	4	787	371,650
Humble	..	..	..	..	....	55,700
Orange	6	5	..	1	5,125	141,850
Orchard	..	..	..	..	....	*
Pierce Junc.	4	4	..	..	845	315,450
Saratoga	3	..	..	3	....	32,200
Sour Lake	3	2	..	1	210	113,700
S. Liberty	..	..	..	..	....	68,550
Spindle Top	5	5	..	..	7,534	1,418,000
W C'l'mbia	..	..	..	..	....	264,500
Others	..	..	..	..	....	69,250
Wildcats	6	2	..	4	860	.....
Totals	43	29	..	14	17,026	3,425,300

*Included in others.

NORTH TEXAS

Field—	Completions	Producers	Gas Wells	Failures	Initial Prod.	Monthly Prod
Archer Co.	24	11	..	13	755	687,450
Baylor Co.	..	..	..	..	....	3,100
Burkburnett	2	1	..	1	3	373,400
Clay Co.	..	..	..	..	....	17,750
Cooke Co.	3	2	..	1	15	*
Electra	7	5	..	2	27	349,750
Fannin Co.	1	..	..	1	....	.....
Foard Co.	1	..	..	1	....	.....
Haskell Co.	1	..	..	1	....	.....
K-M-A Iowa Park	13	7	..	6	260	56,850
Montague County	17	11	..	6	480	453,750
S. Vernon-Wilbarger	16	11	..	5	1,115	331,050
Totals	85	48	..	37	2,655	2,273,100

CENTRAL-WEST TEXAS

Field—	Completions	Producers	Gas Wells	Failures	Initial Prod.	Monthly Prod
Brown Co.	35	8	3*	24	875	475,700
Young Co.	7	4	..	3	57	301,850
Eastland-Desdemona	11	5	3†	3	700	259,000
Stephens County	11	4	1¶	6	1,075	235,950
Shackelford	18	16	..	2	1,175	168,700
Callahan County	5	2	1§	2	....	125,950
McCulloch County	3	..	..	3	....	.....
Throckmorton	2	..	..	2	....	36,750
Coleman County	6	2	1¶	3	345	31,000
Jack Co.	5	5	..	..	250	50,150
Palo Pinto County	3	1	..	2	35	14,450
Others	..	..	..	..	....	15,500
Totals	106	47	9	50	4,512	1,715,000

*Includes 4,500,000 feet of gas.
†Includes 19,000,000 feet of gas.
‡Includes 750,000 feet of gas.
¶Includes 3,500,000 feet of gas.

Meter Company Holds Sales Conference

Pittsburgh—Officials and representatives of the Pittsburgh Equitable Company recently closed a four-day meeting here. The conference was held for the mutual benefit of those employed at the plant and the district representatives, so that each representative of the company may be in a better position to serve customers.

Due to improvements in design and construction, as well as the development of several new products in both the gas and water division, interesting views were discussed.

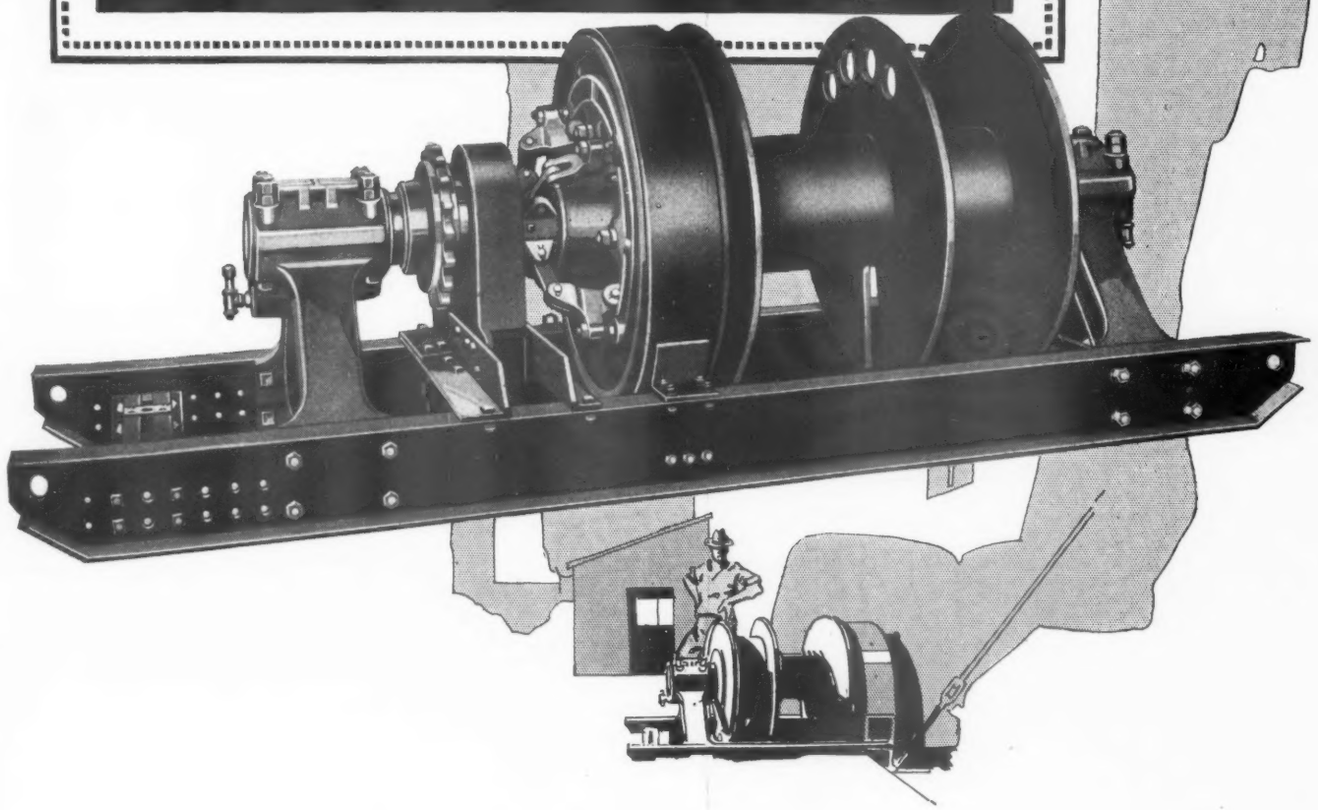
The meeting closed with the annual banquet which was attended by all department heads as well as the office and sales department.

NATIONAL CHAIN DRIVEN SAND REEL

TYPE "J"

DESCRIPTIVE BULLETIN No. – 18 N ON REQUEST

THE NATIONAL SUPPLY COMPANIES



Say you saw it in The OIL WEEKLY

Texas Quarterly Production Report Fourth Quarter, 1927

Leading Companies in Texas, Fourth Quarter, 1927

	Fourth Quarter 1927	Third Quarter 1927	Second Quarter 1927	First Quarter 1927	Fourth Quarter 1926
Gulf Production Company	5,849,323	5,593,842	6,195,776	5,333,581	6,672,353
Yount Lee Oil Company	3,363,020	3,776,083	3,411,161	4,169,962	3,946,246
Magnolia Petroleum Company	3,125,352	2,843,208	2,926,145	2,960,421	2,764,045
Humble Oil & Refining Company	2,963,199	2,815,955	3,017,439	2,596,456	2,876,289
The Texas Company	2,814,945	2,804,057	3,048,653	3,022,818	2,712,872
Phillips Petroleum Company	2,192,109	2,660,000	2,962,760	3,189,861	3,378,143
Atlantic Oil Prod. Company	1,956,282	1,581,321	.....	.....	.....
Prairie Oil and Gas Company	1,779,957	1,273,734	1,510,666	1,629,326	1,084,267
Landreth Prod. Corporation &	1,550,958	.....	.....	.....	.....
Big Lake Oil Company	1,517,868	1,656,053	1,702,783	2,018,382	1,735,063
Simms Oil Company	1,338,521	1,169,631	935,314	.....	.....
Roxana Petroleum Corporation	1,122,990	902,342	.....	.....	.....
Sun Oil Company	1,082,868	946,941	.....	.....	.....
Marland Oil Company	1,047,009	974,180	1,386,779	1,608,528	1,918,869
The California Company	879,599	.....	.....	.....	.....
The Pure Oil Company	862,194	956,059	925,217	.....	.....
Southern Crude Oil Purchasing Company	847,050	.....	.....	.....	.....
Eastland Oil Company	800,293	1,120,559	.....	.....	.....
Total, fourth quarter			56,842,468		
Total, third quarter			51,695,154		
Total, second quarter			50,864,154		
Total, first quarter			51,084,194		
Total, fourth quarter, 1926			53,471,631		

Gross Receipts Tax Reports Filed on Crude Oil Production for the Quarter Ending December 31, 1927.

Name, Add ess	Barrels	Value
Atlantic Oil Producing Company, Dallas	1,956,282	$1,288,346
Ada Belle Oil Company, Batson	22,654	27,839
Anna Belle Oil Company (9-30-27), Dallas	4,616	6,463
Amicable Life Insurance Company, Waco	373	522
Alamosa Oil Company, Amarillo	85,461	59,991
Agate Brothers, Eastland	90	111
Anna Belle Oil Company, Dallas	4,418	6,185
Abraham Earl. Bridgetown (3)	903	1,147
Atkinson & Sandefer Oil Corp., Breckenridge	13,586	17,645
Alamo Oil Company, Brownwood	555	710
Apple-Brandeberry Oil Company, Wichita Falls	11,750	16,027
Abercrombie, J. S., Company, Houston	116,063	137,424
Anchor Oil Company, Dallas	1,540	1,983
Amarillo Oil Company, Amarillo	2,068	1,551
Adams, W. B., Burkburnett	531	699
American Well & Prospecting Co., Corsicana	31,294	31,294
Andrews, W. R., et al, Putnam	1,733	2,241
Acorn Oil Company, Beaumont	8,244	9,893
Apex Oil Corporation, Amarillo	726	545
A. & P. Production Company, Houston	153,670	189,653
Alaska Petroleum Company, Amarillo	1,558	1,168
Atlantic Keystone Petroleum Co., New York, N. Y.	1,672	1,672
All-American Oil & Gas Co., Oklahoma City, Okla.	39	51
Andrews Petroleum Corp., New York, N. Y.	5,875	6,363
Arkansas Fuel Oil Company, Pittsbu gh, Pa.	7,241	9,440
American Refining Co., Inc., by J. W. Hooser et al, Rec., Wichita Falls	76,365	74,818
Atlas Oil Corporation, Humble	3,711	4,453
Ascot Company, Wichita Falls	8,241	11,912
Associated Oil Company, San Francisco, Cal	68,397	79,754
Alonso, Jr., Oil Producers, Laredo	1,756	1,756
Artex Oil Company, Wichita Falls	2,366	3,163
Atlas Production Company, Burkburnett	1,172	1,593
Aarco Oil & Gas Company, Baltimore, Md.	9,410	12,971
Antilley, J. H. (3-31-27), Sour Lake	3,309	4,633
Antilley, J. H. (6-30-27), Sour Lake	3,586	4,304
Antilley, J. H., (9-30-27), Sour Lake	4,406	5,287
Antilley, J. H. Sour Lake	4,567	5,481
Albany Oil Co. & Hope Oil & Gas Co., Breckenridge	4,660	6,029
Amerida Petroleum Corporation, Tulsa, Okla.	179,189	193,548
Arnold & Frazier, Putnam	306	419
Ashe Syndicate, The, Fort Worth	688	894
Bridwell Oil Company, Wichita Falls	3,312	3,911
Bridwell & Heydrick Oil Co., Wichita Falls	86,980	116,574
Bridwell & Heydrick, Trustee, Wichita Falls	4,569	6,296
Bullington, Lee, Pendleton & Bullington, Wichita Falls	8,951	12,014
Big Lake Oil Company, Pittsburgh, Pa.	1,517,868	1,664,860
Boller, C. W. et al, Wichita Falls	3,090	4,202
Big State Oil Corporation, Dallas	263	341
Black, W. A. (9-30-27), Albany	596	728
Burk Burnett, Jr., Oil Co., (6-30), Fort Worth	445	514
Burk Burnett, Jr., Oil Co., (9-30), Fort Worth	359	411
Buffalo Oil Company (9-30-27), Amarillo	7,551	6,162
Briggs, R. F., et al, (9-30-27), Corsicana	262	290
Baird Oil Company, The, Moran	429	576
Bowman Oil Company, Rockdale	1,870	2,501
Baker, J. A. & Mollie B., Breckenridge	9,543	12,596
Bass & Dillard, Wichita Falls	2,142	2,951
Blue Bonnett Petroleum Corp., San Antonio	1,240	1,476
Bynum, W. W., Rockdale	1,473	1,957
Biel, Wm. A., B. Von Ormy	32	39
Boller, C. W., Wichita Falls	7,915	10,759
British American Oil & Prod. Co., Wichita Falls	12,338	16,604
Bailey, Fannie, Wichita Falls	1,101	1,445
Black Cat Oil Company, Electra	1,336	1,763
Britton, Gordan & Wickens, Strawn	635	866
Burton McKee Oil Corporation, Strawn	397	516
Brinkley Prod. & Ref. Co., Pittsburgh, Pa.	549	692
Burns, L. T., Wichita Falls	90,746	123,342
Burns & Maxson, Wichita Falls	5,271	6,999
Bridwell & Mayfield, Wichita Falls	12,021	16,730
Biggs Oil & Gas Company, McKinney	1,270	1,753
Black Diamond Oil Company, Amarillo	580	435
Big Four Consolidated Oil Company, El Paso	59	76
Big Indian Oil & Development Co., Gainesville	763	1.335
Borealis Oil Company, Oklahoma City, Okla.	3,650	4,886
Broughton, S. J., Brownwood	64	83
Brown, Dr. E. W., Estate, Orange	4,659	5,591
Brown, Mrs. Carrie, et al, Orange	27,327	32,795
Baldwin F. C., et al, Fort Worth	1,921	2,627
Brady Brothers, Minerva	2,906	3,685
Breckenridge Gasoline Company, Toledo, Ohio	85	107
Bynum & Palmer, Rockdale	242	312
Barnsdall Oil Company, Tulsa, Okla.	49,771	55,916
Barbara Oil Company, Oklahoma City, Okla.	8,926	12,637
Babcock, Scheurer & Schaffke, Electra	126	170
Buttram Petroleum Corp., Oklahoma City, Okla.	61,767	86,021
Beaver Oil Corp., Oklahoma City, Okla.	14,801	11,100
Blair & Kell, Dallas	871	1,103
Badger Oil Company, Amarillo	9,142	6,857
Bartlett Production Co., Rockdale	2,673	3,555
Brooks & Hanlon, Inc., Tulsa, Okla.	1,064	1,361
Beams, Drew, Okmulgee, Okla.	716	946
Black, W. A., Albany	881	1,068
Black-Pearson & Hudson, Corsicana	4,995	4,995
Bluebonnet Oil Company, Wichita Falls	1,007	1,350
Bonchil Company, The, Wichita Falls	6,286	8,810
Bonner, J. H. S., et al, Wichita Falls	7,386	9,889
Brazos River Gas Company, Wichita Falls	329	460
Bailey, Carl B., Wichita Falls	2,204	2,985
Barkley & Meadows, Wichita Falls	98,101	129,155
Bohner, C. J., Burkburnett	5,958	8,175
Bashara, J. F., Houston	12,117	14,986
Bashara, M. J., Oil Company, Wichita Falls	2,183	2,511
Bashara, M. J. & Sons, Wichita Falls	9,641	11,745
Brownwood Prod. & Refg. Co., Brownwood	1,868	2,415
Bleakley & Kinnison, Wichita Falls	961	1,235
Barnes, Jere B., Electra	1,197	1,493
Bashara & Bashara, Waco	144	216
Bluebonnet Oil Company (9-30-27), Wichita Falls	864	1,157
Bryan Oil Corporation, Houston	1,217	1,229
Barkley, T. G., Sour Lake	1,595	1,914
Bell Burke Oil Co., Waco	462	572
Bell Burke Oil Co, (9-30-27), Waco	490	690
Velva Oil Company, Eastland	32,461	48,884
Bevering, A. H., et al, Henrietta	2,114	2,736
Booth Oil Company, Olney	215	280
Brannon & Murray, Cisco	1,860	.2,470
Broderick & Perrin, Fort Worth	148	189
Bruce, H. J., Wichita Falls	1,855	2,485
Bruce, H. J. (9-30-27), Wichita Falls	1,905	2,573
Burkburnett Production Oil Trust, Baltimore, Md.	771	1,056

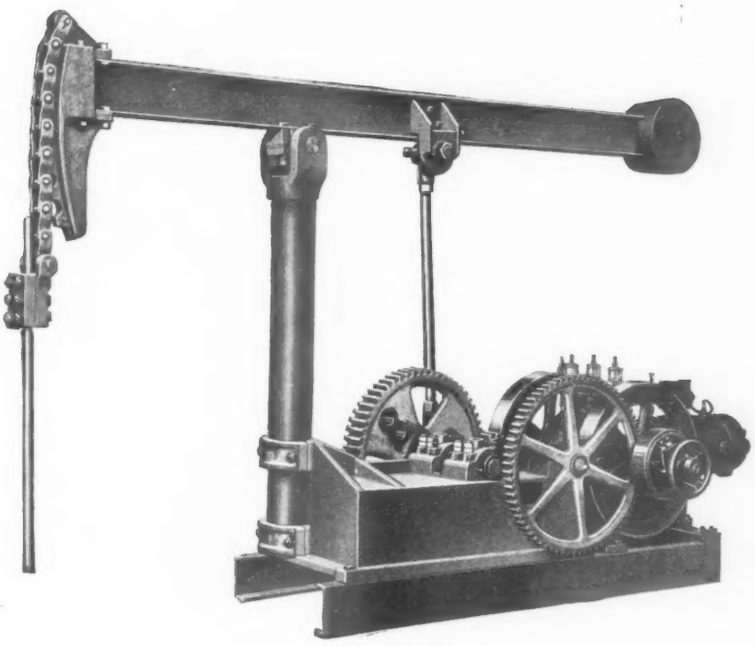
Regardless of governmental or private regulation, our national supply of petroleum remains fixed and unchangeable. True conservation consists in the elimination of underground waste. Smackover, Tonkawa, Seminole and other Halliburton-cemented fields are significant of what can be done in this direction.

HALLIBURTON
OIL WELL CEMENTING COMPANY
DUNCAN, OKLAHOMA

Name, Address	Barrels	Value
Braden Company, The, Wastland	2,411	3,523
Burke-Greis & Gwinup, Tulsa, Okla.	2,264	3,232
Burke-Greis Oil Company, Tulsa, Okla.	2,261	3,113
Birk & Kelly, Iowa Park	161	215
Brown & Company, Inc., Cisco	1,665	2,232
Briggs, R. F., et al, Corsicana	99	116
Bexata Oil Company, San Antonio	1,864	2,241
Bush & Cluck, Waco	350	350
Bartlett, Wm. & Co., Electra	469	648
Bradstreet, L. G., Fort Worth	22,825	31,040
Carey, E. S., et al, Wichita Falls	2,294	2,891
Carey, E. S., et al, (Miller Drlg. Co.) Wichita Falls	1,054	1,350
Cowling & Hoppes, Burkburnett	112	149
Cowling & Newell Oil Co., Burkburnett	323	426
Clough, Chas. E. (9-30-27), Wichita Falls	956	1,280
Coyle Concord Oil Co. (9-30), San Antonio	2,090	2,653
California Company, The, Colorado	879,599	649,224
Coons & Hotchkiss, Graham	6,709	8,165
Crosbie, T. S. & G. K., Production Co., San Antonio	1,641	1,969
Culbertson Bros. Company (9-30), Fort Worth	2,741	3,808
Culbertson Bros. Company, Fort Worth	2,075	2,884
Corzelius Bros. & Taggert (9-30), Eastland	362	362
Caldwell, John W., Wichita Falls	1,776	2,415
Cashdollar & Snyder, Brownwood	326	351
Clara Oil Company, Wichita Falls	673	877
Cushing Refining & Gasoline Co., Cushing, Okla.	31,742	19,045
Cranfill Bros. Oil Co., Wichita Falls	1,199	1,580
Canyon Oil & Gas Co, Cross Plains	3,354	4,613
Cole, W. C., Wichita Falls	3,663	4,952
Cady Oil Company of Texas, Moran	87	113
Carter, Roy I, Wichita Falls	633	847
Church & Fields, Odessa	21,462	12,877
Curry, E. M., Rising Star	2,087	2,904
Canery, S. C., et al, Tulsa, Okla.	642	753
Carteret Oil Company, Jersey City, N. J.,	728	976
Capitol Oil Company, Orange	4,510	5,359
Cranfill Bros. Oil Company, Dallas	5,764	8,039
Clarkson, Wm. Jr. (for Oil City Iron Works) Corsicana	1,225	1,615
Cornhuskers Oil Company, Lincoln, Neb.	3,296	3,296
Camp Oil & Gas Company, Wichita Falls	3,024	4,021
Craig & Lowrie, Pittsburgh, Pa.	2,806	3,351
Cox, Edwin B., Ardmore, Okla.	2,525	3,356
Chapman, O. H., Waxahachie	227	284
Clem Oil Company, Houston	383	383
Church-Weekly-Fields et al, Odessa	126,987	.....
Charter Oil Company, Brownwood	27,123	34,866
Culbertson Company (9-30-27), Wichita Falls	16,057	22,140
Collier, J. W. & wife, Wichita Falls	569	676
Cezeaux & Martin (9-30-27), Humble	7,727	9,272
Cezeaux & Martin (6-30-27), Humble	7,142	8,571
Cezeaux & Martin, Humble	11,190	13,428
Coble-Whittenburg Oil Co., Amarillo	10,213	7,660
Caruthers Company, San Antonio	2,233	2,636
Chapman, P. A. Jr., Eastland	670	871
Central Holding Company-Jennings, Wichita Falls	689	935
Cisco Oil Company, Tulsa, Okla.	38,123	48,117
Clay, J. D., Houston	2,768	3,271
Carlin & Tobin, Ranger	290	430
Carlin, W. W., Ranger	296	420
Cullen, H. R., et al, Houston	173,368	213,172
Collins, J. L. & Co., Corsicana	9,898	10,062
Center Field Oil Company, Amarillo	438	329
Crosscut Corporation, The, Fort Worth	2,030	2,479
Curtis, Jas. A., Wichita Falls	3,108	4,228
Continental Oil Co. of Texas, Wichita Falls	673,031	826,755
Cockrell-McIlroy Oil Co., Amarillo	73,373	55,050
Chenault, Palmer & Burch, Wichita Falls	19,774	26,993
Coffey & Schlaffke, Electra	72	97
Crown Central Petroleum Corp., Houston	79,930	79,930
Crown Oil & Refining Co., Houston	15,154	18,185
Coyle-Concord Oil Company, San Antonio	1,996	2,512
Chenault, W. L., Amarillo	1,036	1,409
Culbertson Company, Wichita Falls	14,661	20,211
Chestnut & Smith Corporation, Tulsa, Okla.	705	930
Carter Fine & Carter, Wichita Falls	3,127	3,826
Clark, R. R., Wichita Falls	14,530	19,611
Cosden, J. S., Inc., Fort Worth	12,272	15,979
Chapman, P. A., Estate, Waxahachie	19,328	24,948
Chapman Homer Oil Co., Dallas	3,937	5,332
Conway Bros. & Gholson, Ranger	365	478
Conway Brothers, Ranger	334	447
Col Tex Oil Company, Spokane, Wash	466	540
Clark, G. W., Wichita Falls	232	306
Coffield & Hale, Wichita Falls	4,330	5,500
Crenshaw, Albert, Wichita Falls	4,764	6,352
Cline, W. D., et al, Wichita Falls	517	689
Chicago Oil & Land Company, Rockdale	2,816	3,561
Christie Brothers, Wichita Falls	13,362	18,085
Clear Creek Oil Company, Brownwood	302	379
Coffey & Graham, Wichita Falls	399	543
Clear Lake Oil Company, Rockdale	2,583	3,433
Columbia Petroleum Company, Inc., Mirando City	20,094	20,094
Conner Sons & Cloughley, Gotebo, Okla.	28,337	33,387
Continental Supply Company, St. Louis, Mo.	568	726
Cook & Reeder et al, Wichita Falls	5,832	8,112
Cook & Reeder, Wichita Falls	407	540
Cranfill & Reynolds, Cisco	512,375	372,656
Cohen & Lebow Trust, Baltimore, Md.	156	205
Cohen, Aaron, Baltimore, Md.	12,579	17,471
Crowe & Crowe, Iowa Park	45	62
Consolidated Oil Co. of Texas, Wichita Falls	25,948	33,828
Coppock & Coleman, Iowa Park	3,490	4,711
Campbell & Wills, Burkburnett	1,651	2,240
Cunningham Production Company, El Paso	35,537	42,362
Corpus Christi Oil Co., Corpus Christi	426	426
C. W. M. T. Oil Company, Wichita Falls	2,194	2,973
Cook, R. H., Electra	471	639
Davis, Caroline, Somerset	415	489
Duho Oil Company, Houston	466	700
Dismukes, H. A., Receiver, Liberty	6,611	7,934
Dale & Crawfod, Electra	1,016	1,374
Daniel, S. B., Wichita Falls	1,366	1,858
Duffield, Howard Oil Company, Tulsa, Okla.	1,171	1,427
Dale Oil Corporation, Wichita Falls	24,956	33,791
Durston, H. H., Fort Worth	1,285	1,464
Dutton & Rhome (3-30-27), Fort Worth	1,170	1,488
Dominion Oil Company, Tulsa, Okla.	1,611	2,102
Dennis, J. S., Moran	2,047	2,633
Dutton & Rhome, Fort Worth	2,903	3,754
Duncan & Stratton, Cross Plains	479	586
Developers Oil & Gas Co., Wichita Falls	1,101	1,475
Derby Oil Company, Dallas	499	644
Davis, W. F., Wichita Falls	318	429
Dillon, Glasscock Company, San Antonio	690	787
Douglas Production Company, Electra	2,081	2,786
Douglas Bros. Oil Company, Electra	550	748
Dale Oil & Refg. Co., Wichita Falls	1,342	1,796
Duke-Langford Oil Company, Wichita Falls	772	772
Dale-Knotts Oil Company, Wichita Falls	316	435
Deutser, B., Trustee (9-30-27), Beaumont	1,463	1,755
Davis & Wallace (9-30-27), Cameron	1,457	1,850
Dudley, G. S., Iowa Park	1,350	1,856
Dixie Oil Company, Inc., Shreveport, La.	167,760	101,109
Dixon Creek Oil Company, Amarillo	260,653	195,490
Double Five Oil Company, Amarillo	2,091	1,569
Davis, L. R., Tulsa, Okla.	185	191
Devonian Oil Company, Tulsa, Okla.	42,317	31,738
Dunaway, J. E., et al, Wichita Falls	1,324	1,787
Dull-Earls Texas Company, Albany	465	598
Dallas Petroleum Company, Dallas	209	219
Dean Oil Company, Burkburnett	162	191
Duquesne Oil Corporation, Eastland	272	401
Dalton, Jack Oil Company, Fort Worth	2,069	2,782
Dunigan Brothers, Amarillo	3,417	2,562
Derby & Haines, Wichita, Kan.	16,021	12,015
Derby, Haines & Williams, Wichita, Kan.	19,401	14,550
Delaney & Associates Oil Co., Inc., Pampa	336,087	361,459
Danciger Oil & Refining Co. of Texas, Fort Worth	188,896	205,572
Delmar Oil Company, Bartlesville, Okla.	2,675	2,010
Dibble Oil Company, San Antonio	1,518	1,518
Deutser, B., Trustee, Beaumont	1,172	1,407
Dixon & Reeder, Wichita Falls	242	271
Dixon, Reeder & Cook, Wichita Falls	1,269	1,717
Deering, Jno. A., Houston	9,844	12,716
Douglas Oil Company, Tulsa, Okla	2,674	2,005
Den-Wich Oil Company, Abilene	1,618	2,168
Davis & Wallace, Cameron	1,912	2,428
Dorian, R. P., Wichita Falls	7,233	7,449
Dixie Drilling Co., Fort Worth	560	764
Deep Sands Syndicate, The, Corsicana	477	477
Diana Oil Company, Tulsa, Okla.	1,780	2,379
Diana Oil Company, Tulsa, Okla.	1,128	1,518
Eastland Oil Company, Fort Worth	800,293	488,027
Eastern Petroleum Corp., Wichita Falls	1,779	3,321
El Paso-Burkburnett Oil Company, El Paso	250	360
East Batson Oil Company, Batson	17,256	20,707
Erickson, David, Wichita Falls	60	81
Empire Gas & Fuel Company (6-30), Bartlesville,	153,844	146,213
Electra Production Co., Inc., Electra	1,054	1,415
Empire Gas & Fuel Co. (9-30), Bartlesville	103,858	90,003
Empire Gas & Fuel Co., Bartlesville	313,532	322,719
Electra Gulf Oil Company, Electra	4,505	5,315
Eureka Producing Company, Tulsa, Okla.	19,665	26,424
Empire-Pierce Fordyce (lease), Fort Worth	11,754	16,121
Ellison Oil Company, Rockdale	230	292
Emrick, U. R., Chicago, Ill.	348	434
Echo Oil Company, Amarillo	17,945	13,458
Ellis & Lancaster, Beaumont	848	1,056
Eddelman, E. H., et al, Wichita Falls	480	644
Eddy Oil Company, Beaumont	1,121	1,345
Erie Investment Limited of Texas, Toronto, Canada	654	826
Eggers, J. E., Trustee, San Antonio	846	997
Engel, E. A., Albany	699	911
Eastern Petroleum Corp., Wichita Falls	3,266	4,288
Easton, E. S., Wichita Falls	1,956	2,641
Ellis & Anderson, San Antonio	164	197
Evangeline Petroleum Company, Wichita Falls	2,417	2,417
Electra Callahan Oil Company, Electra	801	1,056
Earnest Oil Company, Rockdale	854	1,102
Ferguson, Hawkins & Hester, Wichita Falls	581	798
Four Oil Company, Wichita Falls	3,169	4,179
Farlyn Oil Company, Houston	26,945	27,166
Farish & Ireland lease, Houston	2,870	3,444
Fogle Oil Company, Minerva	1,925	2,395
Frio Oil Company, San Antonio	370	365
Frontier Oil Company, San Antonio	13,675	16,343
Ferguson, W. R., Wichita Falls	491	664
Fleming & Kimbell, Sherman	6,973	7,931
F. H. E. Oil Company, Sherman	17,771	18,901
Franchot, D. W. & Company, Tulsa, Okla.	63	78
Fresno Oil Company, Wichita Falls	16,035	22,128
Foster & Sandford, Fort Worth	365	425
Fensland Oil Company of Texas, Denver, Colo.	7,395	9,680
Flynn, W. B., Beaumont	4,069	4,949
Freeman-Hampton Oil Corp. ("A & B"), Wichita Falls	8,109	10,848
Fain, McGaha Oil Corp., Wichita Falls	146,037	184,356
Falls Production Company, Wichita Falls	10,353	13,880
Fuchs, Fritz, Taylor	307	381
Fort Ring Oil & Gas Co., Fort Worth	222	337
Foountain Production Company, Saratoga	2,235	2,682
Fuqua & Hipp, Grandfield, Okla.	1,494	1,979
Ferguson & Watson, Electra	1,824	2,482
Foster, Townsend & Ungren & Frazier, Putnam	1,049	1,427
Fresno Oil Company (9-30-27), Wichita Falls	19,261	26,581
Gilbert & Rothschild, Carbon	743	847
Gopher Oil Company, Amarillo	1,474	1,142
Golding Phillips Oil Company (9-30-27), Amarillo	4,362	3,486
Gohlman Oil Company (9-30-27), Rockdale	303	382
Green, W. J., et al, Wichita Falls	111	145
Gates-Bacon-Lea, Wichita Falls	16,711	21,724
Gaither Production Company, Rockdale	1,666	2,147
Graham & Lash, Moran	313	420
Godley Oil & Gas Company, Dallas	24,219	26,770
Glass Brothers, Rosebud	848	1,072
Ginter, Geo. E., San Antonio	119	149
Ginter Lang Oil Company, San Antonio	1,890	2,345
Glenridge Oil Corporation, St. Louis, Mo.	4,418	5,836
Gilliam Logan Oil Company, Fort Worth	2,891	3,295

A Straight Pull

Heavy Roller Chain and Sprocket in place of Links.



"Pattin" 5 H.P. Single Well Pumping Power

Weight 2275 Lbs.

HERE is a single well pumping power suitable for wells 2,000 feet deep, equipped with a heavy Roller Chain and Sprocket which permits a straight pull—giving additional strength to the unit.

This power is fitted with our new 5 H.P. gas or gasoline engine, is fully water jacketed (not hopper cooled), has Wico igniter, and both gas and gasoline attachment.

With a normal speed of 20 strokes per minute, it can be adjusted to 15 in., 18 in., 21 in., and 24 in. stroke.

Two one-hundred-pound counter-balance weights are regular equipment and are made to form a box on top of beam. This box can be filled with old iron to increase counter-balance if necessary.

Both engine and power are mounted on 6 in. channels and very easy to handle.

Watch for Announcement of our New 100 H.P. Unit

PATTIN PRODUCTS

Gas Engines
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Water Pumps
Air and Gas Compressors
Vacuum Pumps
Oil Country Boilers
Torpedo Reels and Clamps
Steel Storage Tanks
High Pressure Tanks
Howe Casing Heads
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THE PATTIN BROS. CO.

Write for prices, or inquire of any of our representatives.

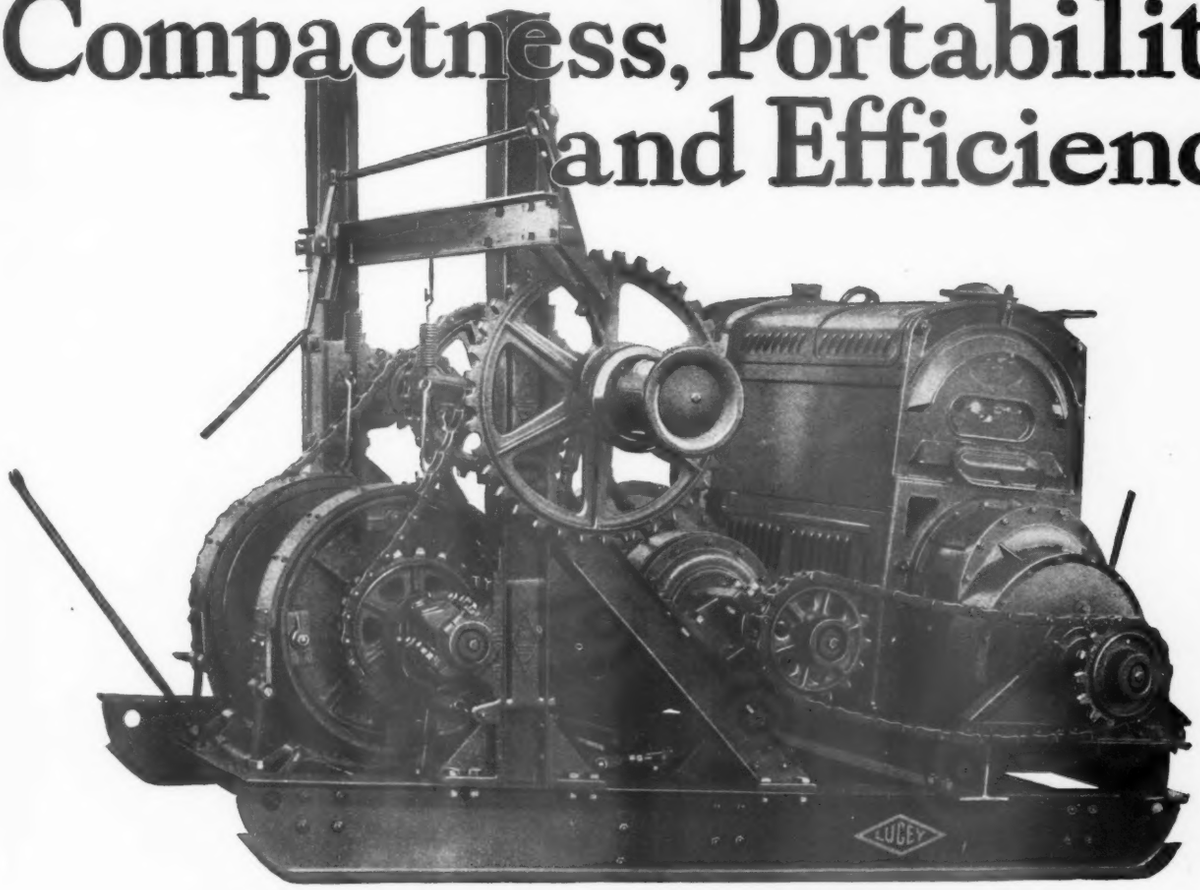
The Pattin Brothers Company

MARIETTA, OHIO

Tulsa, Okla.	Nowata, Okla.	Wichita Falls, Texas	Putnam, Texas	Bradford, Pa.
A. S. Dunnington	J. Barnes	J. W. Noland	Putnam Supply Co.	The Blaisdell Machinery Co.

Name, Address	Barrels	Value
Godfrey, F. L., Enid, Okla.	117	155
Gladis Oil Company, Saratoga	2,679	2,679
Golding Phillips Oil Company, Amarillo	2,388	1,791
Gordon Oil Co. of Texas, Logan, O.	152	200
Gunn Production Company, Cross Plains	2,787	3,387
Galves Oil Corp., Tulsa, Okla.	4,759	6,282
Granite Oil & Gas Company, Ridgeway, Colo.	348	474
Gulf Coast Oil Corp., Dallas	15,876	19,051
Grand Duke Producing Company, Muskogee, Okla.	155	194
Gray & Adams, Inc., Gainesville	12,543	14,550
Gray, T. H., Fort Worth	810	931
Grayce Oil Company, Wichita Falls	21,036	28,747
Gholson, Jno. M., et al, Ranger	8,606	11,421
Goldenrod Oil Company, Dallas	1,077	1,386
Grady, D., Electra	526	737
Garrett, W. T., Eastland	751	990
Glasscock Leasing Syndicate, San Antonio	1,940	2,357
Gardner Bros. & Collins, Wichita Falls	1,929	2,578
Gulf Production Company, Houston	5,849,323	5,233,698
Group No. 1 Oil Corporation, Big Lake	461,636	503,021
Golding & Cochran, Wichita Falls	9,589	12,274
Goldelline Oil Corporation, Oklahoma City, Okla.	14,801	11,100
G. & K. Production Company, San Antonio	1,568	1,887
Guthrie Cole & Ferguson, Wichita Falls	1,048	1,362
Gibson Oil Corporation, Amarillo	83,265	81,257
Gates Oil Company, Ardmore, Okla.	3,686	5,478
Gallagher & Lawson, Desdemona	236	300
Gladys Belle Oil Company, Tulsa, Okla.	6,869	9,127
Gilliland Oil Company, Tulsa, Okla.	730	1,012
Goolsbee & Goolsbee, Wichita Falls	235	310
Guaranty Oil Company, Electra	118	162
Gultex Production Company, Waxahachie	3,293	4,545
Gywnn-Boyd Drilling Company, Wichita Falls	13,240	9,957
Gwynn, P. F., Agent, Wichita Falls	1,918	2,571
Gwynn, P. F., Wichita Falls	121	149
Gutzler, W. F., Wichita Falls	383	521
Harris & Simons, Tulsa, Okla.	9,428	8,396
Golconda Oil Co. No. 1, Wichita Falls	179	227
Gilman & Conway Bros., Ranger	8,319	11,765
Gilliland, C. W., Wichita Falls	2,651	3,612
Goolsbee & Graham, Wichita Falls	59	77
Graham, H. L., Wichita Falls	1,260	1,616
Grayburg Oil Company, San Antonio	206,798	210,749
Gates Oil Co. (Wyo. Corp.), Denver, Colo.	12,618	9,463
Gilman, R. F., Cisco	245	326
Gilman & McMurray, Cisco	306	421
Golden West Oil Company, San Antonio	26,090	27,950
Gohlson Morman & Dorsey et al, Ranger	2,772	3,775
Goldhill Oil Company, Iowa Park	1,786	2,393
Gordon, H. B., Houston	3,188	4,432
Gordon, Folwell, Dickson, Inc., Houston	37,275	43,458
Gilbert Company, Beaumont	5,555	6,666
Gainesville Oil & Development Co., Gainesville	6,794	7,882
Glasscock, Rosa V., San Antonio	900	1,079
Hamilton & Martin, Wichita Falls	1,362	1,812
Hambleton, Geo., San Antonio	504	614
Hoppes, W. T., Burkburnett	52	70
Hobbs, Henry (formerly The Tulsa Co.), Wichita Falls	655	865
Canady, Roy, Corsicana	594	677
Hester, Hawkins & Ferguson, Trustees, Wichita Falls	654	868
Holloway, R. R., Receiver, Brownwood	926	1,259
Horn & Horn, Trustees, Kansas City, Mo.	4,950	4,046
Hutchinson County Oil Company, Amarillo	300	195
Hickey, T. J., et al, Corsicana	71	94
Hamilton, Robt., et al, Eastland	322	418
Houston Oil Co. of Texas, Houston,	8,920	11,642
Helf, C. H., Albany	751	856
Hueco Ranger Oil Company, El Paso	670	893
Hope Oil & Gas Company, Fort Worth	18,857	24,702
Howard Petroleum Corp., Tulsa, Okla.	989	1,211
Houseman, D. H. & Co., Dallas	57	75
Hill, W. M., Putnam	19,944	28,472
Hill & Dowell, Batson	2,985	3,582
Howard, Duffield & Berlin, Tulsa, Okla.	1,527	1,635
Herogan Oil Company, Amarillo	3,522	2,642
Hobson & Voorhees, San Antonio	775	1,112
Handrick, Aug., Moran	255	309
Hedrick-Camp Drilling Co., Wichita Falls	10,783	12,619
Hill, W. R., Trustee, Burkburnett	242	334
Hardy Oil Company, Wichita Falls	2,874	3,852
Hemby, J. M., Electra	815	1,104
Hitchman & Howard, San Antonio	1,653	2,037
Hinson & Tidwell, Graham	4,390	5,776
Humble Oil & Refg. Co., Houston	2,963,199	3,044,788
Harvey, R. A., Houston	1,847	2,136
Hobbs Oil Co., Tulsa, Okla.	2,958	3,973
Hagaman Refining Corp., Ranger	711	921
Halmack Oil Company, Dallas	2,331	3,099
Humphreys Bros., Inc., Brownwood	483	658
Herbert Oil Co. of Texas, Fort Worth	922	1,272
Hankamer, Earl C. & Co., Sour Lake	657	789
Hickok Producing & Development Co., Toledo, O.	462	500
Houghland Production Company, Dallas	5,149	6,416
Horn, T. W., Houston	1,088	1,306
H-Y Oil Company, Inc., Fort Worth	2,819	3,865
Holmes & Huey, Amarillo	4,649	3,486
Humphreys Corporation, Houston	66,983	83,901
Hardie, J. M. & Co., Sour Lake	497	597
Hughes, Wm. K., Trustee, St. Louis, Mo.	1,217	1,586
Harris & Bryan, Eastland	220	314
Hyde & James, Albany	9,260	12,415
Huber, J. M. Co., of Louisiana, Breckenridge	502	692
Hanlon Gasoline Company, Tulsa, Okla.	1,377	1,744
Home Oil & Gas Company, Inc., Albany	3,244	4,153
Helvetia Oil Company, San Antonio	15,077	17,851
House, Lewis Oil Company, Cameron	839	1,057
Hull Oil Company, Beaumont	13,461	16,035
Howell, M. L., Lohn	657	854
Hockaday & Shaw, Wichita Falls	1,408	1,871
Hefley, McIntosh & Thomas, Cameron	666	834
Homaokla Oil Company, Oklahoma City, Okla.	4,823	6,814
Hammond, L. P., Wichita Falls	2,748	3,794
Holman Bros. & Leidecker, Graham	9,961	13,920
Hooser, Jno. W., *Hooser Oil & Dev. Co., Dallas	20,154	27,537
Houston Production Company, Houston	14,977	17,667
Hammon, Wayne H., Special Acct., Wichita Falls	1,256	1,632
Hammon & Garrett, Wichita Falls	4,907	6,731
Hammon, Heyser & Garrett, Wichita Falls	1,542	2,094
Hammon & Heyser, Wichita Falls	418	568
Hammon, Heyser & Garrett, Special Acct., Wichita Falls	14,860	18,180
Hammon, Heyser, Garrett & King, Wichita Falls	3,044	4,396
Harrison Oil Company, Houston	18,483	26,431
Harris & Hayes Company, Okmulgee, Okla.	603	748
Holbrook & Woods, Wichita Falls	9,719	13,026
Hines, Harry, Wichita Falls	324	421
Hughes, J. K., Oil Company, Mexia	36,650	50,472
Hughes, J. K., Development Co., Mexia	131,502	137,581
Hutton Oil Corporation, Cisco	1,830	2,177
H. B. J. Oil & Gas Trust, Baltimore, Md.	2,245	3,201
Harris Fisher Oil Company, Cisco	481	638
Harwell Bros., Abilene	906	1,221
Harwell, O. H. & O. E., Abilene	644	873
Hamon, Jake L., Jr., Ardmore, Okla.	9,949	13,018
Hill & Riley, Amarillo	966	724
Holmes & Riley, Amarillo	11,183	8,387
Hyde, George, Houston	2,204	2,645
Hyde Production Co., Houston	5,704	6,845
Hart-Mexia Syndicate, Fort Worth	196	259
Hoffer Oil Corp., Fort Worth	5,002	6,709
Hagy Company, The (9-30-27), Amarillo	196	201
Houston Gulf Gas Company, Houston	10,141	10,141
Hamilton & Martin, Wichita Falls	2,113	2,705
Hooser, Jno. W., et al, Receivers for—		
N. B. Chenault, Wichita Falls	2,414	3,263
Bashara, M. J., Wichita Falls	7,892	8,872
Waggoner, R. M., Wichita Falls	2,889	3,930
Priddy, W. M., Wichita Falls	9,962	12,951
Isaacs, B. K. (7-1 to 12-31), Fort Worth	1,418	1,731
Idaho Oil Company, San Antonio	1,255	1,526
Infield Petroleum Company, Austin	936	1,260
Ilseng Production Company, Fort Worth	2,174	2,815
Ilseng, A. G., Fort Worth	200	278
Interocean Oil Company, Tulsa, Okla.	16,561	21,790
Independent Oil & Gas Company, Tulsa, Okla.	295,266	180,356
Irick Oil Company, Waskom	384	491
Jackson, T. H., Sipe Springs	200	256
Johnson Bros., San Antonio	9,695	12,052
Jones, J. A., Moran	501	688
Judson Oil Company, Tulsa, Okla.	11,212	15,196
Julia Oil Company, Sour Lake	3,962	4,755
Japhet Production Company, Houston	18,873	14,154
Jones, W. A., Thomas Phillips lease, Minerva	229	294
Janellen Oil Company, Tulsa, Okla.	160	208
Jackson, J. S., Trustee, Sour Lake	2,604	3,125
Jacob Oil & Gas Company, Graham	579	777
Jones, Edwin M., El Dorado, Ark.	20,020	26,044
Jones, J. E., Wichita Falls	1,395	1,897
Justin Oil Corporation et al, Wichita Falls	13,005	17,908
Jennings, J. C., et al, Wichita Falls	576	801
Jonray Oil Company, San Antonio	3,737	4,463
Junior Oil Company, Cross Plains	2,167	3,145
Jackson Company, The, San Antonio	1,481	1,800
K. & S. Corporation, Laredo	19,716	19,716
Kokomo Petroleum Co. (9-30-27), Gorman	1,783	2,405
F. F. Knotts (9-30-27), Wichita Falls	568	773
Kent, C. G., Corsicana	37,105	47,554
Kent-Middleton Refining Co., Corsicana	20,590	26,460
Klainfelder, B. F., Breckenridge	609	801
Kurz Oil Company, Somerset	575	667
Kuhlemeier-Kliner, Cisco	1,433	1,921
Kurz, A. A., San Antonio	394	483
King, Anna B., Muskogee, Okla.	2,657	1,594
Kershaw, L. R., Muskogee, Okla.	2,657	1,594
Kerr, F. P., Corsicana	507	660
Kolp, C. F., Electra	12,079	15,920
Klemcke, Geo., Trustee, Van Ormy	2,256	2,622
Kahle Gracey & Diver, Bridgeport, Ill.	9,597	9,813
Kimmell & Dillard, Wichita Falls	4,237	5,602
Kilgore, M. H., Beaumont	234	281
Kate Bell Oil Company, The, Dallas	1,403	1,915
Kembrow Company, Wooster, Ohio	18,685	25,701
Keen & Woolf Oil Company, Shreveport, La.	24,860	29,832
Kokomo Petroleum Company, Gorman	1,470	1,990
Kavanaugh Petroleum Company, Houston	844	1,097
Keystone Production Co. of Texas, The, Fort Worth	5,069	6,913
Koenig, Max W., San Antonio	13,369	13,369
Kishi, K., Terry	1,353	1,624
Kone Production Company, San Antonio	22,216	31,341
Kendricks, P. S., Albany	948	1,123
Kirby Petroleum Company, Houston	34,683	23,928
Kewanee Oil & Gas Co., Titusville, Pa.	131,454	131,454
King & Daniel, Wichita Falls	4,468	6,152
King Royalty Company, Wichita Falls	22,367	30,551
Killam, O. W., Laredo	1,567	1,567
Killam, O. W., et al, Laredo	350	490
Kemp Randel Wilson, Electra	50	67
Keener Oil & Gas Co. of Texas, Tulsa, Okla.	6,286	8,290
Kleiner, Chas. J., Cisco	715	973
Knotts, F. F., Wichita Falls	627	855
Kaufman, L., San Antonio	435	509
Kistler & Co., Frank E., Inc., Denver, Colo.	57,646	43,234
Kynerd, W. D., Dallas	786	1,007
Leonard Pet. Co. (9-30-27), Washington, Pa.	7,589	9,249
Lake Shore Oil Co. (7-30-27), Houston	596	715
Lake Shore Oil Co. (9-30-27), Houston	2,622	3,147
Loggie & Arendt Oil Company, Albany	2,190	2,953
Sam Letwin, Breckenridge	2,114	2,748
Lewis, M. L. (9-30-27), Wichita Falls	391	516
Lewis, M. L., Wichita Falls	153	202
Long Oil Co., Roy., Navasota	2,579	3,337
Laredo Oil Company, Laredo	2,164	2,164
Lawson, Eugene B., Nowata, Okla.	39,326	52,545
Linedo Oil Company, Lincoln, Neb.	2,454	2,454
Lytle Oil Association, Lytle	292	335
Lockhart & Company, Los Angeles, Cal.	20,353	19,751
Lebow, C. H., Tulsa, Okla.	846	1,166
Levy, Trustee, No. 1, Leonard M., Ranger	4,099	6,133

Compactness, Portability and Efficiency



Lucey Heavy Duty Roller Bearing Reverse Clutch

SINGLE plate disc type. Driving plate is fixed in position, and the two clamping plates move away from it. Full clearance of ⅛" from each friction face is obtained, thus eliminating drag in reverse motion. The friction plate can be removed for relining and replaced without disassembling the entire clutch mechanism. Capacity 312 H.P. per 100 R.P.M., working tongue 156 H.P. per 100 R.P.M. Sprockets of any number of teeth for either No. 1240 or No. 1030 chain or belt pulleys up to 14" face can be furnished.

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NEW standards of mechanical efficiency are evidenced in the improved Lucey Portable Draw Works shown above. This unit should find an immediate and widespread field of usefulness.

Simple arrangement of all parts, the highest grade materials, combined with a disc type, full releasing, positive non-drag type of clutch, make this a leader of portables for a depth of up to 2500 ft. Clutch is of a new design. Whole machine can be mounted on an Athey Wagon, or used anywhere.—As usual, Lucey patented and superior features on drum shaft and brake band mechanism.

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George J. Hausen, Inc., Los Angeles, Cal.
Oil Well Equipment Co., (Lucey Boilers) Los Angeles, Cal.
Petroleum Equipment Co., Los Angeles, Cal.

WHEREVER THERE'S OIL

Say you saw it in The OIL WEEKLY

Name, Address	Barrels	Value
Lytle, C. F., Mexia	15,647	19,964
Lucey Petroleum Co., Dallas	699	911
Lewis & Co., J. E., Eastland	1,995	2,693
Lewis, J. E., et al, Eastland	1,366	1,786
Lake View Oil Company, Sour Lake	15,035	18,043
Leonard Petroleum Co., Washington, Pa.	6,829	8,307
Lone Star Gas Company, Dallas	10,079	13,665
Levy, Leonard M., Trustee, No. 2, Fort Worth	1,996	2,915
Lackey, W. G., Tulsa, Okla.	4,043	5,343
Lamb & Shaw, Brownwood	764	986
Lamb, Geo. E., Brownwood	298	386
Lowe, Delaney & Carter, De Leon	1,817	2,490
Lee, Homer, Wichita Falls	1,963	2,670
Leonard Oil Company, Somerset	324	389
Leonard, Geo., Somerset	470	559
Lesh, John I. & Co., Wichita Falls	9,865	10,207
Louisiana Oil Refining Corp., Shrevepo t, La.	26,181	32,174
Langford, W. S., Wichita Falls	1,307	1,724
Lake Graham Oil Company, Houston	1,899	2,601
Lowry Oil Corp., Wichita Falls	2,157	3,033
Lucky Ten Oil Co., Amarillo	12,258	10,621
Little, Wm., Breckenridge	214	270
Larkin, W. B., Burnett, et al, Wichita Falls	468	629
Lesh-Kilcrease & Co., Nocona	3,841	4,313
Lesh & McCall, Nocona	38,867	39,320
Lowenstein Oil Company, Rockdale	1,516	1,926
Liberty Oil & Gas Co., Baltimore, Md.	1,340	1,695
Lain Oil Company, San Antonio	1,415	1,677
The Lake Erie Trust Co., Trustee, Cleveland, Ohio	818	1,119
Landreth Production Corp., Fort Worth	1,550,958	930,575
Little Caddo Syndicate, Fort Worth	1,138	1,512
Lee & Simon, Cisco	246	333
Len-Cook Oil Company, Electra	992	978
Magee Brothers, Electra	677	938
Magee & Stipe, Electra	946	1,285
Majestic Oil Co., The, Amarillo	24,011	23,977
Mid-Texas Petroleum Co., Oklahoma City, Okla.	17,901	24,324
Miller & Miller, Putnam	505	677
Moore, F. L., Trustee, Tulsa, Okla.	3,762	4,959
Murphy, J. A., Mineral Wells	323	406
Magnolia Petroleum Co., Dallas	3,125,352	3,197,347
McCarter, R. C., Cisco	538	721
McLester Oil Company, Breckenridge	9,420	14,212
McCoy, J. H., Tulsa, Okla.	218	320
May, F. N., Santa Anna	251	283
Mohegan Oil Company, Mohegan Lake, N. Y.	125	157
McNallen & Letwin, Breckenridge	941	1,236
Mills & Garrety, Corsicana	2,216	2,770
Minor Oil Company, Beaumont	7,832	9,398
Marland Oil Co. of Texas, Fort Worth	1,047,009	812,173
Moore & Henderson, Tulsa, Okla.	428	596
McCheeney, Nancy, Olney	6,085	8,196
McCarty Oil Company, Wichita Falls	90,062	125,157
Mary Elizabeth Oil Company, Dallas	10	13
Martin Petroleum Company, Humble	3,385	4,063
Mennis, G. W., Wichita Falls	4,822	6,667
Midwest Exploration Co., The, Amarillo	196,082	161,954
Madeen & Hunt, Olney	4,135	5,623
McDonald, M. C., Putman	5,522	7,448
Merrick & Bristow, Ardmore, Okla.	6,819	6,358
Maben Oil Corp., Wichita Falls	638	840
Moutray & Son, Abilene	551	703
Mid-Kansas Oil & Gas Co., Findlay, Ohio	981,599	634,091
Mook Texas Oil Co., Inc., Fort Worth	17,087	23,348
Macknold Company, San Antonio	326	382
McDonald, W. W., et al, Dallas	12,516	16,936
McMurray, I. L., et al	4,124	5,704
McElreath & Suggett & Anderson & Gaus, Wichita Falls	1,732	2,226
Minerva Petroleum Co., Minerva	1,231	1,577
Milham Corporation of Texas, San Antonio	108,205	135,399
Matador Oil & Gas Co., The, Quanah	221	291
Moore, N. A., Eastland	1,322	1,861
Mecom Oil Company, Liberty	22,696	27,236
McMan Oil & Gas Co., Tulsa, Okla.	332,475	268,245
McCrary, E. W., Tulsa, Okla.	3,930	5,047
Montgomery, Rea, Montgomery, Sedwick	2,293	3,026
Maer & Staniforth, Wichita Falls	2,719	3,064
Medio Oil Company, San Antonio	229	286
McEwan, J. P., Fort Worth	1,422	1,842
Marnet Oil Oil Company, Tulsa, Okla.	4,275	5,568
McDaniel, E. R., Cisco	5,853	8,230
Moran, W. J., Wichita Falls	3,002	4,146
Monarch Royalty Corp., Kansas City, Mo.	41,195	21,707
Moutray Oil Company, Abilene	115,516	153,005
McNamara Oil Co., Beaumont	2,587	3,104
Mues & McDermott, Fort Worth	426	544
McMurray, Root & Rhodes, Eastland	1,736	2,372
McJunkin, Florence, Ranger	768	1,142
Mann, F. A., Graham	1,187	1,638
Meridian Petroleum Corp., Tulsa, Okla.	3,890	5,104
Meredith, J. D., Moran	4,282	4,794
Maxwell, J. C., Fort Worth	210,890	130,713
McCutcheon, C. E., Trustee, Wichita Falls	7,109	9,592
Moody Corporation, Houston	93,193	112,898
Minnehoma Oil & Gas Co., Tulsa, Okla.	14,691	11,018
McLester Oil Co., Breckenridge	4,898	6,348
Margay Oil Corp., Tulsa, Okla.	3,273	4,181
McBride, W. C., Inc., St. Louis, Mo.	2,987	3,563
Mid-Continent Petroleum Corp., Tulsa, Okla.	16,128	21,336
Morton, A. D., Bartlesville	765	872
Maxson & Company, Wichita Falls	1,600	2,145
McCullough, Everett, Wichita Falls	556	746
Midwest & Gulf of Texas Trust Estate, Tulsa, Okla.	1,150	1,380
Mitcham, G. P., Cisco	561	665
Milam Production Co., Rockdale	633	802
Mendenhall Oil Co., Cross Cut	2,232	3,089
McCormick & Noack, Rockdale	394	501
McIlroy Oil Company, Amarillo	234,521	175,890
McNallen & Griffin, Tulsa, Okla.	3,934	5,095
Moss Kelling et al, Mexia	7,618	9,980
Moss & Keeling (Rosson lease), Mexia	1,747	2,277
Moss & Urschel, Mexia	6,336	8,091
Moss, Urchel & Keys, Mexia	16,042	20,534
Moss & Keeling (Simmons lease), Mexia	2,194	2,940
M. & V. Oil Co., Wichita Falls	7,136	9,640
Murchison Oil Company, Wichita Falls	83,939	60,377
Madison Oil & Gas Co., Fort Worth	9,098	12,606
Minntex Oil Corp., Wichita Falls	815	833
McLester Oil Co., Eastland	57,760	83,841
Manhattan Oil Co., Kansas City, Mo.	11,506	11,500
Marsalis Bros., Humble	1,314	1,576
Maxson & Company (9-30-27), Wichita Falls	1,583	2,121
Maxson & Company (6-30-27), Wichita Falls	1,807	2,425
Medina Oil & Gas Co., San Antonio	267	321
Moore, W. M., (4-1 to 12-31-27) Wichita Falls	8,994	10,772
Moellendick, Fred, (9-30-27) Cisco	1,599	2,103
National Oil Co., San Antonio	946	1,098
Nabob Oil Co. (9-30-27), Amarillo	8,892	10,337
New Oil Co. and Homer Slicker, Cisco	911	1,153
Navarro Oil Co., Houston	159,423	202,223
Newport & Ohio Petroleum Co., Newport, N. Y.	4 6	266
Number Nine Oil Corp., Tulsa, Okla.	2,743	3,715
Necessity Oil Corp., Dallas	2,141	2,353
Noble-Thomas Oil Co., Wichita Falls	414	514
Newton-Palmer Oil Co., Rockdale	838	1,052
New Domain Oil & Gas Co., Pittsburg, Pa.	6,531	4,898
Nimrod Oil Co. et al, Dallas	453	628
Noble Oil & Gas Co., Tulsa, Okla.	3,896	5,053
National Petroleum & Ref. Co., Wichita Falls	969	1,288
Nutt & Gates, Wichita Falls	1,687	2,327
Nabob Oil & Gas Co., Amarillo	9,974	10,560
Natl. Investment Co. & Floyd Jones, Breckenridge	2,685	3,658
Noack & Lanning, Rockdale	1,202	1,600
North Fork Oil Co., Amarillo	5,136	3,852
Nunn McCauley Oil Co., Amarillo	19,661	14,746
Noack Oil Company, Rockdale	2,638	3,377
Norman Oil Co., Wichita Falls	2,061	2,803
Olden, Wm. P., Iowa Park	1,455	1,999
Owenwood Pool No. 3, J. W. Robbins, Trustee, Fort Worth	5,342	6,784
Owenwood Oil Corp., Fort Worth	1,796	2,283
O'Neil, John, Wichita Falls	14,174	19,415
Ohio Somerset Oil Co., Cleveland, Ohio	1,837	1,929
Overby, J. D., Iowa Park	639	857
Oil Investment Company, Wichita Falls	3,557	4,707
Old Colony Oil Co., Dayton	2,771	3,326
Ocean Oil & Refg. Co., El Paso	1,169	1,357
Ocean Oil & Refg. Co. (9-30-27), El Paso	1,167	1,355
Osage Development Co., Bartlesville, Okla.	1,889	1,889
Omohundro, W. B., Wichita Falls	3,236	4,706
Oil Operators Trust, Fort Worth	58,519	68,587
Oltex Oil Company, Fort Worth	2,471	3,237
Olean Petroleum Co., Bristow, Okla.	37,078	39,210
Oil States Petroleum Co., Enid, Okla.	2,131	1,306
Orange Petroleum Corp., Orange	29,524	35,425
Oriental Oil Co., Dallas	1,290	1,654
Oktaha Co., The, Tulsa, Okla.	844	1,193
Omilak Oil Co., Spokane, Wash.	278	333
Owens Oil Co., Brownwood	1,137	1,319
Osborne, R. R., Amarillo	12,304	13,320
Orth, Thos. R. T., Wichita Falls	422	480
Old Ocean Oil Company, Kansas City, Mo.	4,204	4,620
Olney Oil & Refg. Co., Olney	986	1,313
Pennowa Oil & Gas Co., Skiatook, Okla.	21,059	15,794
Phillips Petroleum Co., Bartlesville, Okla.	2,192,109	1,930,518
Prairie Oil & Gas Co., Independence, Kan.	119,926	112,779
Prairie Oil & Gas Co., Independence, Kan.	1,660,032	1,316,791
Pollard, W. E. & C. E., Pampa	10,415	10,807
Pollard, W. E. & C. E. (9-30-27), Pampa	1,998	2,038
Palo Duro Oil Co., Amarillo	14,258	10,694
Prather, Ed, Special, Houston	328	416
Pinto Oil Co., Mineral Wells	655	800
Pigg & Murchison, Vernon	456	583
Pivoto, M. E., Sour Lake	3,468	4,162
Pois, M., et al, Wichita Falls	5,318	7,233
Pois, M., Trustee, Wichita Falls	359	481
Pois & Johnson, Wichita Falls	1,283	1,745
Plains Production Co., Wichita Falls	2,512	2,928
Parry Oil Co. of Texas, Inc., Fort Worth	1,267	1,642
Pois, Fine & Schulz, Wichita Falls	2,041	2,795
Petroleum Investment Co., Fort Worth	4,574	6,190
Price-Russell & Co., Ranger	5,458	7,271
Primrose Oil Co., Sour Lake	1,053	1,263
Pomona Mutual Oil Syndicate, Pomona, Calif.	3,197	4,378
Putnam Oil Co., Tulsa, Okla.	61,866	81,640
Prescott-Pheonix Oil & Gas Co., A. C. Trumbo, Trustee, Muskogee, Okla.	155	194
Piper, L. E., Vernon	2,012	2,656
Progressive Production Co., Kansas City, Mo.	2,719	3,716
Panden Oil Corp., Dallas	32,382	42,936
Paraffine Oil Company, Houston	14,121	16,945
Portland Drilling Corp., Wichita Falls	1,296	1,728
Philp Bros., Beaumont	1,677	2,013
Payne, F. G., et al, Wichita Falls	2,375	3,277
Prescott Phoenix Oil & Gas Co., Wichita Falls	1,859	2,412
Pantex Oil Company, Fall River, Mass.	41,056	30,792
Pickers & Lewis, Dallas	1,534	2,204
Powell, J. L., Wichita Falls	437	583
Parsons, Ed V., Fort Worth	232	337
Paull Oil Co., Graham	7,000	9,696
Peery-Moran & Woody, Wichita Falls	12,172	16,553
Producers Supply & Tool, Marietta, Okla.	361	470
Powers Production Co., Houston	3,275	3,275
Pitzer & West, Breckenridge	94,789	137,444
Pure Oil Co., Chicago, Ill.	862,194	1,005,124
Pinto Oil Co., Mineral Wells	1,059	1,324
Pemeta Oil Company, Fort Worth	5,069	6,627
Palmer Freddie Oil Co., Rockdale	205	256
Pilkenton & Windham, Burkburnett	3,430	4,597
Perkins & Cullum, Wichita Falls	51,434	66,364
Petroleum Venture Co., Somerset	320	312
Petroleum Producers Co., Wichita Falls	110,304	148,682
Paramount Oil Corp., Amarillo	85,912	64,434
Producers Drilling Co., Wichita Falls	9,889	13,139
Paggi Bros. Oil Co., Beaumont	18,780	22,238

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Name, Address	Barrels	Value
Paggi, Chas. & Co., Beaumont	1,809	2,171
Phillips, W. G., & J. B. Milam, Chelsea, Okla.	121	159
Pickens & Lewis, Dallas	1,343	1,935
Panhandle Refining Co., Wichita Falls	370,364	501,868
Pecos Oil Co., Crane	425,541	255,890
Perkins, J. J., Wichita Falls	3,665	4,900
Poor Boy Oil Co. (9-30-27), Rockdale	716	931
Phillips, J. R., (Heywood) Amarillo	22,527	28,159
Phillips, J. R., (Weatherly) Amarillo	617	463
Phillips, J. R., (Currie) Amarillo	22,012	16,509
Pace & Ward, Breckenridge	2,127	2,866
Pioneer Oil, Gas & Refg. Co., Danville, Ill.	1,445	1,557
Prairie Lee Production Co., San Antonio	11,006	11,006
Pace, Geo. L., Wichita Falls	903	1,340
Pennok Oil Company, Tulsa, Okla.	23,227	28,154
Phillips, J. R. (*Invador Drilling Co.), Amarillo	58,706	44,029
Pilkinton, F. L., Burkburnett	2,462	3,226
Proctor Oil Co. (9-30-27), Wichita Falls	3,197	4,421
P-M Drilling Co., Chelsea, Okla.	339	457
Py-Tex Oil Co., Winchester, Ky.	7,425	10,629
Phillips, Otis, Receiver, Amarillo	26,368	18,729
Quinn, J. W., et al, Eastland	42,819	61,668
Quartet Oil Co., Tulsa, Okla.	9,372	13,172
Quakins Petroleum Co., Ranger	3,930	5,345
Quincy Oil Co., Electra	142	193
Rosenberg, Jacob, Trustee, Tulsa, Okla.	41	53
Rosenberg, J., Tulsa, Okla.	136	176
Rubsam & Hunter, Wichita Falls	2,928	3,955
Rockdale Oil Co., Rockdale	161	202
Ross & Slicker Oil Co., Cisco	1,118	1,467
Relyat Production Co., Houston	6,904	8,228
Rountree & Simpson, Rockdale	301	399
Rountree, Russell & Kemp, Rockdale	940	1,224
Rountree, White & Simpson, Rockdale	1,596	2,138
Reinhart, M. J. Trustee, Oklahoma City, Okla.	627	839
Robinson, Arthur D., et al, Dallas	1,029	1,386
Robinson, Arthur D., Dallas	6,274	9,199
Rhader & Carey, Wichita Falls	8,531	11,055
Ramsey, E. H., Rising Star	1,358	1,887
Rannell Co., The, Oklahoma City, Okla.	6,736	8,957
Roeser & Pendleton, Inc., Fort Worth	118,541	156,287
Rowe, J. G., Wichita Falls	1,646	2,158
Rycade Oil Corp., Houston	218,855	259,660
Rentex Oil Co., San Antonio	10,198	12,401
Ruyle Farm Oil Co., Wichita Falls	8,266	11,152
Red River Oil Co., Tulsa, Okla.	22,225	30,216
Relief Oil Co., Amarillo	13,766	10,324
Ramsel, W. T., Oil Co., Rockdale	2,958	3,816
Russell & Wilson, Wichita Falls	10,315	13,214
Rio Bravo Oil Co., Houston	783,751	961,561
Rockdale Jr. Oil Co., Rockdale	453	584
Robert Oil Corp., Breckenridge	9,580	12,646
Rhodes & Highers, Breckenridge	5,846	7,717
Rex Petroleum Corp., Orange	21,987	26,384
Republic Production Co., Houston	746,856	842,294
Rowan, A. H., Trustee, Fort Worth	1,001	1,285
Ruwaldt, E. J., Gainesville	4,291	5,021
Riner & Bailey, Wichita Falls	64,058	85,379
Root, Rhodes, Gillman & McMurray, Eastland	23,435	31,890
Root & Rhodes, Eastland	4,645	6,501
Root, C. M., Eastland	46,919	68,188
Root, C. M., et al, Eastland	1,193	1,539
Root & Fehl, Eastland	11,497	15,922
Roxana Petroleum Corp., St. Louis, Mo.	1,122,990	911,424
Russell-Sanderson Oil Co., No. 2, Fort Worth	962	1,332
Rochmill, Henry, Trustee, Fort Worth	2,843	3,671
Rowe, M. D., Wichita Falls	2,078	2,810
Ramming, W. F., Wichita Falls	37	52
Ramming & Saunders, Wichita Falls	4,757	6,797
Ramming, R. W., Wichita Falls	9	12
Ramming, Staley & Ramming, Wichita Falls	787	1,076
Riggs & Oliphant, Graham	289	349
Rockdale Development Co., Rockdale	1,709	2,154
Ryan Consolidated Petroleum Corp., Bartlesville	59,722	65,651
Ruby Oil Co., Minerva	316	401
Rex-Tex Oil Company, Winchester, Ky.	7,425	10,629
Ross Amigos Oil Co., Laredo	12,210	12,210
Ross Amigos Oil Co. (9-30-27), Laredo	12,165	12,165
Ross Segunda Oil Co. (9-30-27), Laredo	1,291	1,291
Rio Grande Petroleum Corp., Houston	4,325	4,325
Ross, C. E., Burkburnett	636	894
Ross Segunda Oil Co., Laredo	1,244	1,244
Ramsey & Decker, Breckenridge	2,819	3,665
Ray Featherstone Oil Co., Wichita Falls	2,352	3,186
Ray & Massie, Wichita Falls	17,020	23,019
Reclamation Co., The, Fort Worth	9,159	11,923
Red Bank Oil Co., Tulsa, Okla.	40,933	46,389
Reiter-Foster Oil Corporation, Tulsa, Okla.	11,336	15,074
Rockwell, J. A., & Co., Warren Penn.	2,748	3,479
Rock Creek Oil Corp., Amarillo	15,957	12,036
Ray-O-Oil Corp., Houston	2,325	2,790
Ruthada Oil Co., Oklahoma City, Okla.	23,256	27,260
Regna Oil Co., Saratoga	5,283	5,542
Robinson, O. D., Pittsburg, Pa.	1,871	2,115
Swastika Petroleum Corp., Wichita, Kan.	999	1,278
Seaboard Oil & Gas Co., Wichita Falls	39,686	53,817
Shackelford Oil Co., Ranger	2,038	2,701
St. Albans, Edward, Laredo	4,793	4,793
Shamrock Oil Co., Inc., Wichita Falls	10,787	11,919
Schuls & Pois, Wichita Falls	260	354
Stidham & Thrasher, Electra	347	208
Steed, Paul P., Wichita Falls	4,176	5,578
Speed, C. D., Mgr., Corsicana	328	431
Strelsky & Gambell, Rockdale	805	1,039
Swanner, Jno. L., Wichita Falls	3,225	4,320
Steed, Paul P., Wichita Falls	371	471
Stella Oil Co., Beaumont	13,549	16,259
Sessions, I. P., Rockdale	426	557
Schlicher Oil Co., Beaumont	831	801
Somerset Crude Oil & Refg. Co., Somerset	3,750	4,555
Smith & Bynum, Amarillo	5,498	4,124
Smith, Mrs. Jas. L., Amarillo	12,055	9,041
Saigh, N. A., San Antonio	1,739	2,225
Sircovich & Thomas, Houston	786	880
Shaw, Fox & Adams, Burkett	3,815	4,478
Shaw, Archie, Burkett	11,494	14,024
Shappel Oil Co., Wichita Falls	48,455	65,868
Scott & Britten, Graham	273	356
Schaffner, E. N., et al, Cross Plains	3,300	4,569
Smith, R. E., Houston	15,457	19,924
Standard Oil Land & Leasing Co., Electra	344	463
Salado Oil Co., San Antonio	1,942	2,408
Skinner, E. W., Oil Co., Saratoga	6,094	6,813
Superior Oil Producing Co., Tulsa, Okla.	2,429	3,303
Scarbrough, W. A., Burkburnett	2,777	3,862
Scarbrough, W. A., et al, Wichita Falls	614	762
Silk, Bullington & Clark, Wichita Falls	8,506	7,490
Seyler, Wm., (9-30-27), Tulsa, Okla.	3,380	4,611
Stoops, J. P., Ranger	286	360
Scott & Walker, Albany	4,382	5,609
Simmons, T. K., Tulsa, Okla.	2,443	3,207
Sullivan, M. J., Kansas City, Mo.	339	432
San Balt Petroleum Co., Kansas City, Mo.	386	380
St. Louis Oil & Gas Co., Wichita Falls	645	842
Sindorf & Sindorf, Caddo	1,063	1,379
Sinclair Oil & Gas Co., Houston	92,369	112,405
Schimmel Production Co., Fort Worth	27,796	34,436
Spring Creek Oil Co., Amarillo	14,436	10,827
Selby Oil & Gas Co., Tulsa, Okla.	65,208	91,844
Staley, J. A., Wichita Falls	3,721	5,013
Southern Petroleum Exploration, Inc., Sistersville, W. Va.	8,757	8,444
Staley Mashburn Oil Co., Wichita Falls	104	136
Sigler Oil Co., Inc., Wichita Falls	1,382	1,727
Supreme Oil Company, Orange	3,781	4,538
Summit Oil & Refg. Corp., Amarillo	16,539	12,404
Sedwick Oil Co., Tulsa, Okla.	17,527	22,419
Smith, E. L., Oil Co., Inc., Mexia	200,873	242,795
Simms Oil Co., Dallas	1,338,521	991,949
Stephens Oil Co., Sour Lake	573	688
Snider, C. W., Wichita Falls	1,462	2,033
Schoolfield, R. E., Wichita Falls	253	331
Sunny Jim Oil Co., Tulsa, Okla.	13,804	10,353
Southern Exploration Co., Houston	1,267	1,673
Stovall, E. C., Graham	22,341	30,580
Shoup, O. H., Jr., Colorado Springs, Colo.	6,058	8,342
Stull, R. O., Wichita Falls	17	22
Slick, T. B., Oklahoma City, Okla.	9,490	13,018
St. Marys Oil & Gas Co., St. Marys, W. Va.	25,908	29,489
Sinclair Oil & Gas Co., Tulsa, Okla.	205,887	284,061
Sunburst Oil Co., Amarillo	7,632	5,724
Swensondale Oil Co., Caddo	11,384	14,923
Smith-Hanlon, Inc., Tulsa, Okla.	183	235
Sweeney & Henry, Abilene	4,977	4,628
Sheldon, C. P., Electra	14,382	19,256
Snowden & McSweeney Co., New York, N. Y.	59,638	67,397
Schaffner-Wilson et al, Wichita Falls	2,425	3,399
Sink, Joel, Corsicana	186	238
Sun Oil Co., Dallas	1,082,868	1,329,193
Shasta Oil Co., Laredo	1,314	1,314
States Oil Corp., Eastland	43,280	64,241
Stribling, J. C., Llano	5,105	7,153
Sloan, E. H., Tulsa, Okla.	3,689	4,701
Schuler-Davies Co., Brownwood	4,079	5,066
S & W Oil Company, Amarillo	19,078	13,702
Sheldon, W. J., Electra	2,940	4,029
Sheman Oil & Gas Co., Pittsburgh, Pa.	90	117
Shaw & Rathke, Wichita Falls	64,115	88,147
Security Drilling Co., Wichita Falls	489	691
Southern Crude Oil Purchasing Co., Shreveport, La.	847,050	508,230
Smith, McIntosh & Thomas, Cameron	2,375	3,017
Silurian Oil Co., St. Louis	3,914	5,229
Saunders, Jno. R., Wichita Falls	17	22
Star Drilling Co., Wichita Falls	7,143	9,740
Saratoga Oil Co., Wichita Falls	1,798	2,475
Somerset Oil Co. of Mass., Somerset, Mass.	121	142
Souligny Oil Corp., Ponca City, Okla.	500	375
Staley, Wynne and Co., Wichita Falls	51,193	61,610
Stock, H. I., Cisco	2,341	3,159
Stroube and Stroube, Corsicana	69,996	88,380
Summerfield Oil Co., Tulsa, Okla.	334	447
Shasta Oil Co., Wichita Falls	1,420	1,870
Shasta Oil Co., Laredo	25,368	26,368
Skia Tex Petroleum Co., Amarillo	63,842	47,882
Skelly Oil Co., Tulsa, Okla.	227,577	207,868
Sitrin, Sam and Morris, Tulsa, Okla.	146	184
Schermerhorn Oil Co., Tulsa, Okla.	2,175	2,926
Seybert Bros., Mooringsport, La.	2,734	3,826
Sheffield, Frank H., Houston	1,752	2,102
Shertzer Bros., Dewey, Okla.	16,598	22,151
Seyler, Wm., Tulsa, Okla.	831	1,147
Staley, J. I., and Co., Wichita Falls	5,244	6,966
Sullivan Oil Co., The, Amarillo	1,489	1,116
Texota Petroleum Co., Electra	425	586
Texas Co., The, Houston	2,814,945	3,390,674
Transcontinental (6-30-27), Tulsa, Okla.	316,046	253,062
Transcontinental Oil Co. (9-30-27), Tulsa, Okla.	274,332	189,080
Thomas and Morrison, Colorado, Texas	1,918	1,930
Triangle Oil Co., Brownwood	188	249
Turman, L. C., Fort Worth	124,635	74,819
Trans Bay Oil Co. (9-30-27), Galveston	90	108
Timblin, W. E., Wichita Falls	129	174
Thaxten, W. H., (Estate) Austin	397	516
Trinity Townsite Co., Dallas	730	946
Triangle Tel. and Gas Co., Rockdale	2,337	3,021
Tri-Angle Oil Co., Potter	4,401	3,301
Tagler, F. E., San Antonio	48	60
Trimount Petroleum Co., Shreveport, La.	6,189	8,826
Tyson Oil Co., Sour Lake	618	742
Texas Fidelity Oil Corp., Louisville, Ky.	10,466	15,343
Texas Petroleum Development Co., Cameron	6,655	8,912
Texas Southern Oil and Dev. Co., San Antonio	1,525	2,160

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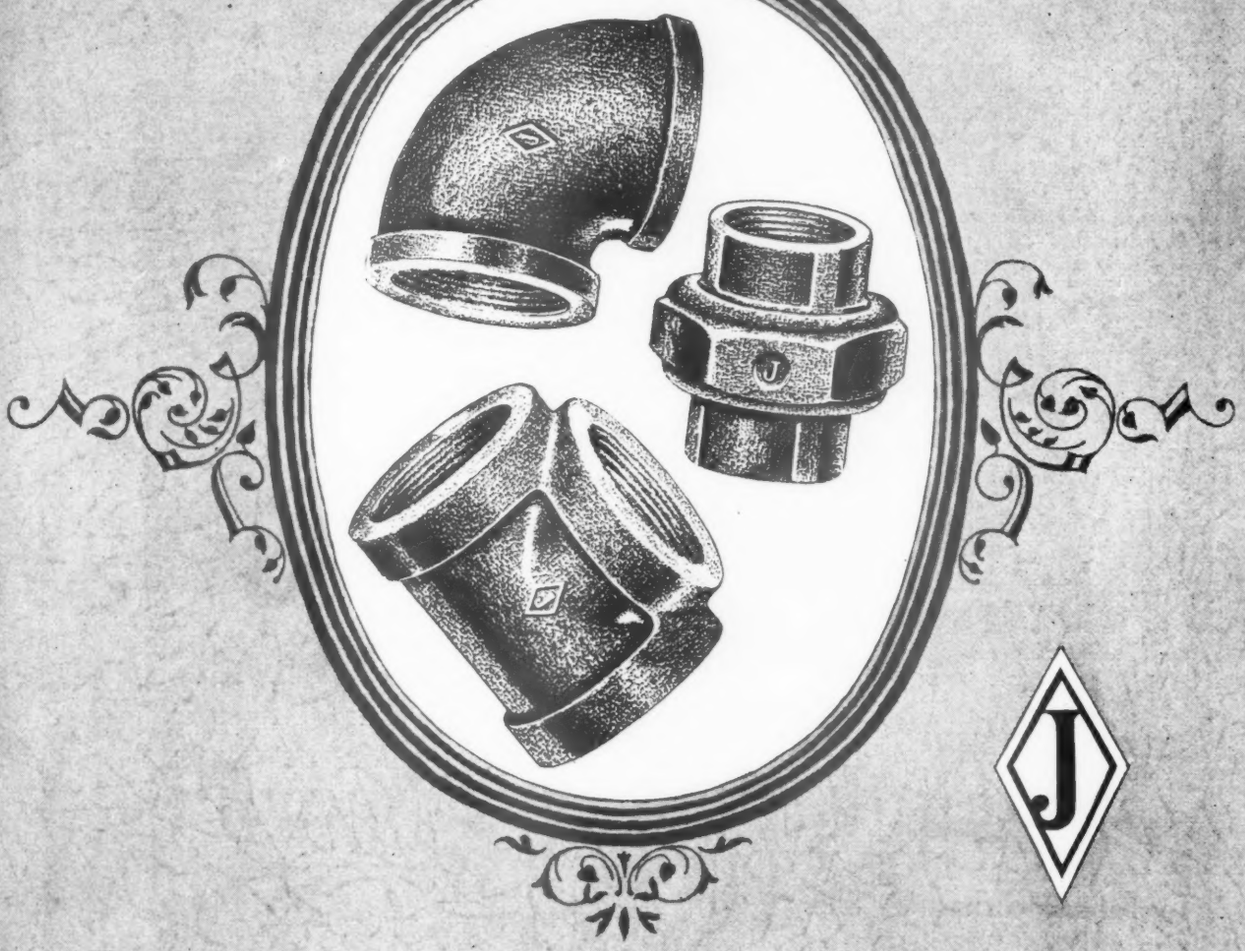

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Name, Address	Barrels	Value
Tillman, J. W., Humble	472	552
Texas Oil Corp., Dallas	157	201
Talley and Irick, Waskom	187	187
Tidwell, R. V., Trustee, Graham	7,482	9,518
Travelers Oil Co., Amarillo	26,495	19,871
Texas Standard Oil Co., Houston	898	1,164
Terry, H. M., Sour Lake	7.460	8,518
Triangle Petroleum Co., The, Fort Worth	1,499	2,034
Texas Unity Oil Co., Dallas	3,927	5,325
TECI Production Co., Breckenridge	520	667
Two Republics Oil and Gas Co., Laredo	11,047	11,047
Thornton, Lomax, Jr., Wichita Falls	6,045	8,338
Texana Oil & Refining Co., Wichita Falls	492	668
Trans-Bay Oil Company, Galveston	90	112
Texas Pacific Coal & Oil Co., Thurber	415,486	378,429
Texas Pacific Coal & Oil Co., Thurber	89,536	117,325
Other Companies for—		
Transcontinental Oil Company, Tulsa, Okla.	89,496	117,190
Transcontinental Oil Company, Tulsa, Okla.	900,055	540,033
Transcontinental Oil Company, Tulsa, Okla.	5,872	7,664
Texas Consolidated Oil Company, San Francisco	17,878	24,448
Tidal Oil Company, Tulsa, Okla.	501,107	357,168
Tidal Osage Oil Company, Tulsa	13,460	14,049
Tannehill, L. B., Albany	14,183	19,840
Texon Oil & Land Co. of Texas, Big Lake	91,228	54,737
Triangle Oil Company, Wichita Falls	626	849
Teatsworth, L., et al, Eastland	4,361	6,530
Tidwell, H. L., Trustee, Graham	834	1,110
Tucker & Langford, Inc., Wichita Falls	40,841	56,966
Tucker, Chas. J., Wichita Falls	1,955	2,447
Tillery, L. J. Oil Company, Inc., Beaumont	13,688	16,651
Tholl Oil Company, Beaumont	5,651	7,942
Thompson, J. E., Humble	334	413
Trinity Production Co., Wichita Falls	706	962
Tucker, W. B., Dallas	854	1,079
Tucker, W. B. & J. C. Cox, Dallas	1,585	2,056
Texas-Electra Company, The, Newark, Ohio	378	517
Thomasson & Co., Inc., E. M., Denver, Colo.	1,756	2,319
Underwood Drilling Co. (Erwin L.), Wichita Falls	660	865
Underwood Drilling Co. (Ward L.), Wichita Falls	3,072	4.055
United Oil & Fuel Co., Sour Lake	840	1,008
United Petroleum Co., Brownwood	154	195
Unity Oil Company, Beaumont	14,072	16,927
United Producers Co., Wichita Falls	1,929	2,587
Union Production Co., Rockdale	2,380	3,048
Unice & Carpenter, Houston	9,217	10,326
Ungren & Frazier, Putnam	298	369
Ungren & Frazier, Gibson & Johnson, Putnam	517	695
Virgania Oil Association, Fort Worth	3,368	4,593
Vacuum Oil Company, Houston	3,542	4,589
Val Verde Oil Company, Del Rio	2,290	2,649
Vergate Oil Company, Tulsa, Okla.	7,078	9,468
Van Cleave Trust, Baltimore, Md.	645	900
Veale, H. A., Dallas	562	765
Weister, E. P., Tulsa, Okla.	1,476	1,919
White, C. W., San Antonio	7,229	9,296
West, Mrs. Bessie M., Houston	2,016	2,419
Williams, Burt, Wichita Falls	1,026	1,177
Webb Oil Company, Humble	5,142	6,170
Watson, W. B., Fort Worth	800	800
Weaver & Pois, Wichita Falls	4,406	5,849
Wolfe, A. T., Wichita Falls	4,837	6,382
West, Mrs. Bessie M., Houston	1,420	1,704
Wilson Drilling Company, Wichita Falls	3,913	5,315
Wilson Drilling Company, Wichita Falls	3,786	5,114
Wilson Drilling Company, Wichita Falls	4,388	5,928
Wilson Drilling Company, Wichita Falls	5,638	7,668
Wilson Drilling Company, Wichita Falls	712	464
Woods & Bennett, Humble	6,181	7,426
Wills Oil Company, Rockdale	2,685	3,415
Wilkins, L. A., Burkburnett	3,193	4,407
Weiler, et al, Cross Plains	1,998	2,934
Wakefield, M. E., et al, Cross Plains	862	1,222
Watkins, J. A., Wichita Falls	315	428
Western Oil Corp. of Texas, Wichita Falls	23,442	28,370
Waggoner Refining Co. Inc., Electra	31,205	39,686
West, J. H., Eastland	3,046	4,167
West, J. F. (9-30), Eastland	516	534
West, J. F., Eastland	339	455
Wichita Petroleum Company, Tulsa, Okla.	2,346	3,132
Hamilton, Walter R., San Antonio	5,636	7,285
Woodburn Oil Corp., Dallas	6,127	8,207
Weed Gayle Oil Company, Beaumont	76,445	91,734
Williams, John H., Dallas	5,288	7,075
Wampem Oil Corp., Dallas	2,623	3,515
White & Duncan, Wichita Falls	4,065	5,404
Witcher & Michel, Wichita Falls	282	387
Wallace, Dr. Chas. William and wife, and Hulda B. Wallace, Wichita Falls	33,480	45,797
Witcher, Annie L., Wichita Falls	2,818	4,026
Westervelt, Noble, Oklahoma City, Okla.	7,426	9,890
Wo-Mac Oil Company, Wichita Falls	2,168	2,949
Wheelock & Collins, Corsicana	39,848	54,476
White Eagle Oil & Ref. Co., Kansas City, Mo.	85,353	64,579
Westheimer & Daube, Ardmore, Okla.	1,252	1,610
Witherspoon Oil Company, San Antonio	40,976	52,105
Wilcox, H. F. Oil & Gas Co. of Texas, Tulsa, Okla.	130,451	137,732
Walker, B. S., Breckenridge	1,436	1,846
Woodward & Lee, Houston	5,340	7,136
Williams, J. F., Mineral Wells	323	406
Wise & Jackson, Sapulpa, Okla.	3,912	5.046
World Oil Company, Fort Worth	2,549	1,911
Western Oil Sales Corp., Wichita Falls	13,583	17,656
Why Not Oil Company, Mexia	20,484	27,392
Wilson, King, et al, Wichita Falls	17	22
Wichita Production Company, Wichita Falls	18,282	24,561
Williams, Burt, Wichita Falls	1,380	1,801
Wilson, Lee, et al, Wichita Falls	8,796	11,803
White, James H., Wichita Falls	317	399
Wilson Broach Company, Beaumont	12,583	15,099
Wood, Benton, Lesh & McCall, Nocona	12,237	13,938
West Production Company, Houston	17,671	18,731
Wentz, L. H., Ponca City, Okla.	57,036	72,034
Whitehill Oil Corp., Tulsa, Okla.	8,179	6,870
Whaley Mineral & Realty Trust, Fort Worth	3,522	4,679
Wahpoo Oil Company, Rockdale	2,551	3,291
Wear, G. F., Brownwood	113	131
Weldon Oil Company, Saratoga	8,310	8,371
Yount-Lee Oil Company, Beaumont	3,363,020	4,144,811
Young Bros. & Alexander, Inc., Fort Worth	18,279	24,638
Zadie Belle Oil Company, Fort Worth	329	448
Champlin Ref. Co., J. T. Parks, Enid, Okla.	122,358	76,205
Beggs, Geo. (Strip), Fort Worth	3,127	5,028
Lubell, Samuel L., et al, Tulsa, Okla.	37,212	27,909
Preston Oil & Gas Company, Brownwood	333	422
Weiler, H. J., Wichita Falls	331	444
Ailes, J. W., Wichita Falls	665	891
Bryant, M. D., San Angelo	7,038	4,222
P. & M. Oil Company, Tulsa, Okla.	107	144
Buchanan, S. R., Batson	8,302	9,963

Montana Wildcats

Great Falls, Mont.—Wildcat operations in Montana give promise of important developments for the coming summer. Most interesting at present is the Flat Coulee test of the Sunburst Oil & Refining Company, which after a delay of a week, caused by the necessity of moving the boilers, has resumed drilling through the Ellis formations. This well has had commercial production in the Sunburst, and the Ellis sand is producing a very large amount of commercial gas. It is thought that wells farther down on the structure will be larger in the Sunburst sand and that the Ellis' deeper horizons may also be productive.

Interesting data on the oil possibilities of the western part of the State will be forthcoming after the drilling of the Niarada-Kalispell Oil & Gas Company's test near Kalispell, 24-24w-23n. Drilling is to be started immediately upon the completion of the well. This wildcat is on the west slope of the mountains and is in a basin where geological formations are not known.

Discovery wells on Bannatyne dome are reported to be pumping about 52 barrels of oil per day, each. The first well for this season's drilling on this dome has already been spudded in by Genou Oil & Gas Company on a location one-quarter mile northeast of the Bannatyne discovery well.

There is increased activity on Pondera Dome, which, with the Bannatyne Dome, was responsible for a large part of the excitement in the Sweet Grass Arch territory last year. Claggett Development Company is spudded on the northeast of Section 8-27-4w, and Fulton Petroleum Corporation, 16-27-4w, is drilling below 1300 feet. Continental Development Company, on the structure nearby which is known as Healey Springs, 19-27-3w, is drilling below 1825 feet.

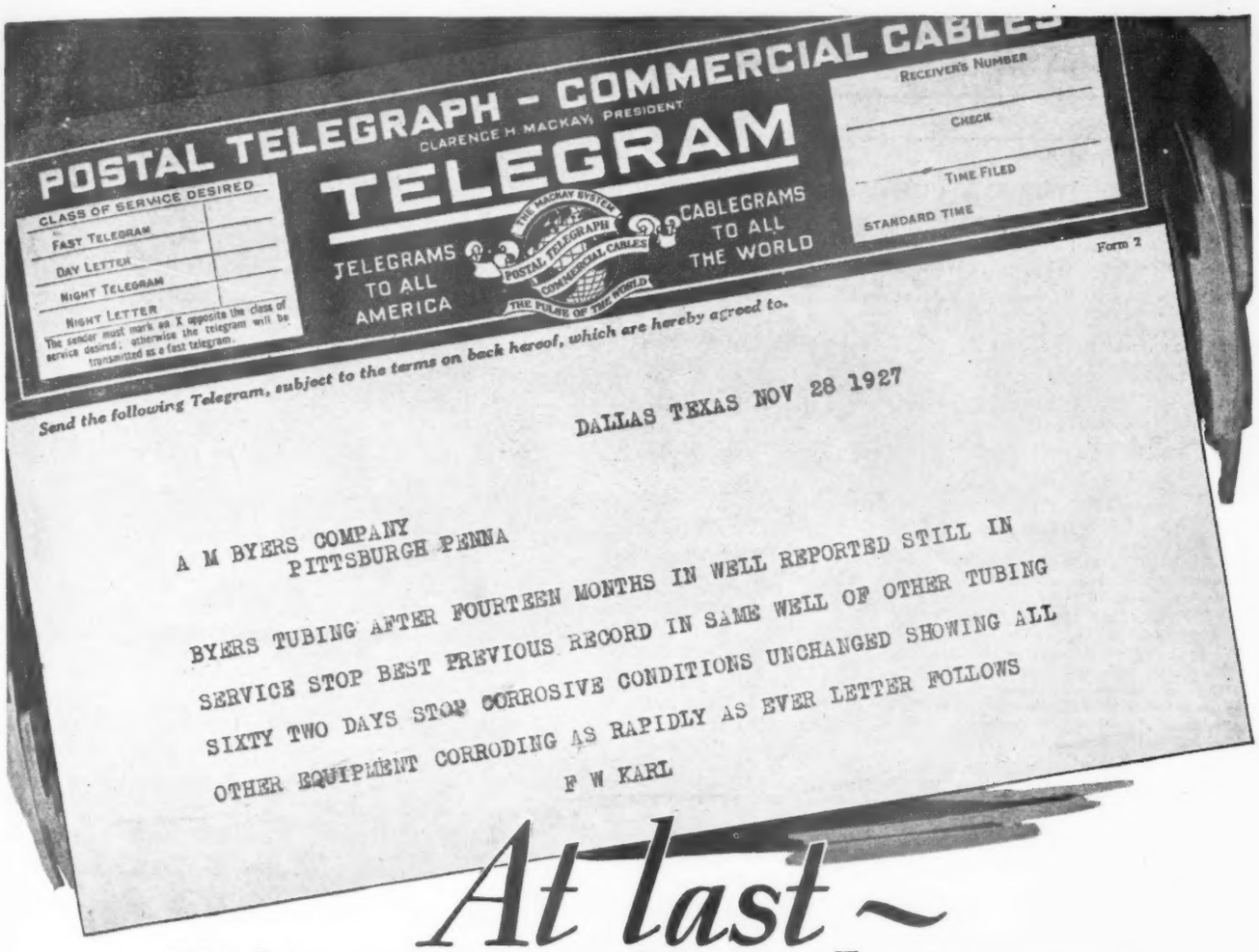
Start Running Oil

Cody, Wyo.—The Cody Petroleum Company plans to start running 4000 barrels of crude per day through the Illinois Pipe Line Company line to railhead here, whence it will be shipped to outside market by rail. The company's Klindt 1 is producing 550 barrels of oil per day while drilling into the Tensleep where the big pay is expected. Total depth is around 3380 feet, and the crude is clean pipe line oil with a gravity of 23.

Wyoming Royalty Contract

Cheyenne, Wyo.—Contrary to the expectation that contracts would be let last week at the special meeting of the state land board for the purchase of state royalty oil from several Wyoming fields, this action was deferred. The board confined itself to a discussion of policy in regard to the contracts and took no official action. At present contracts for the purchase of royalty oil from all fields, except Salt Creek, are held by various companies. The contracts expire April 30.

Great Falls, Mont.—Projected drilling of 20 wells in 1928 by the Adams Company, Inc., has been announced by J. H. Adams, its president. This number may be increased by offset obligations. The wells will be drilled, for the most part, in the north of the Kevin-Sunburst field, where the company has extensive and valuable holdings. Adams Company, Inc., has been particularly successful in all its operations in the field and is said to have a lower average of dry holes than any other operator, independent or otherwise, in the field. Mr. Adams and his associates have drilled about 80 wells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Send the following Telegram, subject to the terms on back hereof, which are hereby agreed to.
DALLAS TEXAS NOV 28 1927
A M BYERS COMPANY
PITTSBURGH PENNA
BYERS TUBING AFTER FOURTEEN MONTHS IN WELL REPORTED STILL IN
SERVICE STOP BEST PREVIOUS RECORD IN SAME WELL OF OTHER TUBING
SIXTY TWO DAYS STOP CORROSIVE CONDITIONS UNCHANGED SHOWING ALL
OTHER EQUIPMENT CORRODING AS RAPIDLY AS EVER LETTER FOLLOWS
F W KARL

At last ~
Tubing Service Vastly Improved

The record referred to above is only one out of a great many showing the remarkable rust-resisting properties of Byers galvanized tubing.

At first blush, your thought will be that any galvanized tubing will give equally good service, regardless of what the best metal may be. Nothing could be further from the truth, as has been repeatedly shown in corrosion tests. The reasons are simple:

The surface of Byers Pipe is made very rough in the pickling process, soaking up zinc like a sponge, and holding it in a *vise-like grip*. This is most important, for zinc in itself is a brittle metal which with handling and wear tends to flake or peel off when applied on steel pipe.

MAKE THIS TEST!

Crush a piece of Byers galvanized pipe flat with a hammer, also a piece of steel pipe, and note how the galvanizing sticks to the former and flakes off the latter! In this difference lies the secret of the much greater durability of Byers galvanized tubing, compared with any other pipe not made of genuine wrought iron.

CAUTION!

Note: Do not confuse Byers with pipe made from so-called "iron," refined in open hearth furnaces. The latter contains no slag (which gives Byers its rough surface) and is, in fact, only good open hearth steel, of low carbon content, sold under various fancy names.

Write for further information.

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Distributors

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GALVANIZED BYERS Tubing
GENUINE WROUGHT IRON

Say you saw it in The OIL WEEKLY

PERMITS GRANTED FOR NEW WELLS

WEEKLY COMPARISON OF NEW WELLS

Following is a condensed table giving a comparison of permits or locations made for new wells during the past year in Kansas, Oklahoma, Arkansas, Louisiana, Texas, California and the Mountain States:

	Week ending Feb. 18	Previous week	Total this month	Total this year	This week last year	This month 1927	Total same date 1927	Year total 1927
Arkansas	3	3	9	20	17	29	70	329
California	21	29	71	159	29	90	213	1,226
Louisiana	10	10	29	79	22	53	136	812
Kansas	24	16	64	150	38	90	233	972
Oklahoma	50	48	161	360	118	268	818	3,702
Texas	173	96	401	823	294	755	1,840	8,665
Mt. States	..	..	..	..	15	34	87	494
Totals	281	202	735	1,591	533	1,319	3,397	16,149

TEXAS

ARCHER COUNTY—Sun Oil Co., Dallas, Farmer 18, BCSL sur, 645 ft w of center of e line. Jones & Holcomb, Wichita Falls, Hawley 3, B 59 Holliday sur, 300 ft from e and 175 ft from s line. F. H. Gohlke, Wichita Falls, McCrory 3, B 235, Amer Trib sur, 300 ft n of No. 1. Harry Hines, Wichita Falls, Peeler 1, B 25, J. W. Harris sur, 200 ft from n and 250 ft from e line. F. P. Cullum et al, Wichita Falls, Anderson 1, B 19, S. Anderson sur, 1470 ft from n and 150 ft from w line.

AUSTIN COUNTY—Humble, Wichita Falls, Grawunder 1, W. C. White sur, 1600 ft from sw and 250 ft from nw line. Shoreline Prod. Co., Houston, Pomycal 10, S. M. Williams sur, 200 ft from n and 75 ft from e line.

ANDERSON COUNTY—Humble, Houston, Jones Jr. 1, D. Roberts sur, 720 ft from n and 400 ft from e line.

BROWN COUNTY—C. F. Lehman, Fort Worth, Evans 6, J. Woodward sur, 300 ft ne of No. 5; 5, 150 ft w of No. 4. Central Texas Ref. Co., Brownwood, Allcorn 3, No. 623 R. Hunnicutt sur, 300 ft nw of No. 2. W. L. Spence, Brownwood, Jacobs 1, B 21, KCSL sur, 150 ft n of center of s line. Phillips Pet. Co., Bartlesville, Okla., Hickman 7, No. 783 T. Benson sur, 299 ft n of No. 6. Dixon Creek Oil Co., Amarillo, Johnson-Clayton 1, S 2, B 31, T&P sur, 150 ft n of center of s line. Pandem Oil Co., Wichita Falls, Thomason 1, J. J. Clelland sur, 150 ft from s and e lines. Shuler-Davies Co., Brownwood, Boysen 1, W. Ahenbeck sur, 150 ft from n and 807 ft from w line. Clark-Buffalo Oil Corp., Brownwood, Brown County 1, No. 624 J. Kenney sur, 150 ft from n and w lines. Humble, Cisco, Gilbreath 11, R. F. Debord sur, 238 ft from e and 150 ft from s line. L. L. Bobb, Brownwood, McCombs 1, B 15, R. Highsmith sur, 1480 ft from ne and 1483 ft from se line. W. M. Mitchell, Houston, Alcorn 2, R. Honeycutt sur, sw cor. Lamb & Shaw, Brownwood, Gwathmey 3, D. Harris sur, 150 ft from n and 535 ft from e line. Rex-Tex & Py-Tex Oil Co., Fry, Fry 16, Stubblefield sur, 1000 ft from w and 950 ft from s line. Duffield & Howard Oil Co., Tulsa, Cox 1, M. Duncan No. 55 sur, 300 ft from w and 210 ft from s line. Pandem Oil Co., Wichita Falls, Hutton 1, J. A. Nobles sur, 150 ft from s and w lines; Hutton 3, J. A. Nobles sur, 150 ft from s and e lines; Curry 5, No. 637 E. L. Betts sur, 150 ft from s and e lines; 4, 300 ft e of No. 2. Central Texas Ref. Co., Brownwood, Allcorn 2, R. Hoeycutt sur, 650 ft from w and 200 ft from s line. M. M. Rowan, Fort Worth, Gwathney 1, D. Harris sur, ne corner. Ditto Oil Interests, Fort Worth, Richardson 2, SA&MG sur, 1050 ft from w and 150 ft from s line. Cranfill & Reynolds, Cisco, Newton 2, No. 623 R. Honeycutt sur, north central. Humble, Cisco, Allen 1, B 6, J. Delgado sur, 200 ft from e and 150 ft from s line. Syndicate Oil Corp., Rochester, N. Y., Hutton 1, J. A. Nobles sur, 150 ft from n and w lines; Curry 2, E. L. Betts sur, 300 ft e of No. 1.

BLANCO COUNTY—C. W. Bates, Parsons, Kas., Massey 1, No. 17 H. Manton sur, 1944 ft from n and 2200 ft from e line.

BEXAR COUNTY—Schimmel Pet. Corp., Ft. Worth, Ginter 4, B 39, C. A. Yoakum sur, 600 ft w of No. 2.

BORDEN COUNTY—Dixon Creek Oil Co., Amarillo, Johnson-Clayton 1, S 2, B 31, T&P sur, 150 ft n of center of s line.

BRAZORIA COUNTY—Rycade Oil Corp., Houston, Wisdom 23, H. N. Cleveland sur, 1900 ft from e and 788 ft from s line; 24, 2579 ft from e and 1056 ft from s line.

CALLAHAN COUNTY—Den Wich Oil Co., Abilene, Compton 10, J. N. Stuart sur, 300 ft s of No. 2. Farlyn Oil Co., Houston, Jackson 1, S 115, BBB&C sur, 150 ft from n and e lines. Prairie Oil Co., Ranger, Anthony 1, S 2, D&D Asy sur, 150 ft from s and e lines. G. C. Curry, Putnam, Brandon 2, S 3, Bayland Asy sur, 300 ft e of No. 1. Young Bros. & Alexander Inc., Ft. Worth, Hatchett 1, S 30, D&D Asy sur, 300 ft from e and 400 ft fram s line. Moutray Oil Co., Abilene, Flores 17, S 149, BBB&C sur, 350 ft e of No. 16. Westheimer & Daube, Ardmore, Okla., Snyder 1, S 143, Buffalo Bayou sur, 330 ft w of center of e line. Benningham & Isaacs, Moran, Hayden 9, S 115, Hayden sur, south central. J. A. Jones, Moran, Warren 11, 2039 TE&L sur, 150 ft from n and w lines; 12, 1125 ft from n and 375 ft from w line.

CALDWELL COUNTY—Jas. H. Bute, Houston, Boyd 1, J. R. Miller sur, 150 ft from n and e lines. J. E. Latson, Lockhart, Gomillion 1, J. Burleson sur, nw cor. H. R. Smith, Luling, Callihan 1, D. Cooper sur, center. Magnolia, Dallas, Mercer 8, J. Berry sur, 300 ft se of No. 5.

COLEMAN COUNTY—Broderick & Calvert, Fort Worth, Buck 1, B. R. Cochran No. 269 sur, 330 ft from n and 150 ft from w line. Roxana Pet. Corp., South Bend, Gray 1, No. 179 D. D. Young sur, 660 ft from n and e lines. Archie Shaw, Burkett, Burns 36, A. Wickson sur, 961 ft from n and 2250 ft from e line.

COOKE COUNTY—W. J. Green, Wichita Falls, Campbell 2, O. F. Leverett sur, 50 ft n of No. 1; 3, 300 ft n of No. 2.

CARSON COUNTY — Texas Co., Wichita Falls, Cobb 1, S 202, B 3, I&GN sur, 330 ft from e and 1420 ft from s line.

CROCKETT COUNTY—McMan O. & G. Co. and Henshaw Oil Corp., Tulsa, Owen 1, S 17, B GG, GC&SF sur.

COMANCHE COUNTY—Edwards et al, Ft. Worth, Allen 1, J. McAllister sur, 150 ft from n and 1170 ft from w line.

COLORADO COUNTY—A. W. Aldvogel, Columbus, Tanner 1, No. 150 J. Walters sur, 850 ft from w and 732 ft from n line.

CLAY COUNTY—H. & H. Oil Corp., Tulsa, Myers 2, B 2, C. Thompson sur; 1.

COCHRAN COUNTY—Marland Oil Co., Ft. Worth, Slaughter 1, CCSL sur, 330 ft from s and w lines.

EASTLAND COUNTY—Moody Corp., Fort Worth, McClelland 1, S 466, SP Ry sur, 550 ft from e and 300 ft from s line.

GRAY COUNTY—Empire G. & F. Co., Wichita Falls, Dauer 1, S 236, B B2, H&GN sur, ne corner. Elick, Sines & Rieger, Pampa, Hopkins 1, S 84, B B2, H&GN sur, 330 ft from n and e lines. Delaney et al Oil Co., Pampa, Jackson 3, S 88, B B2, H&GN sur, 660 ft from n and 330 ft from e line. Operator's Oil Co., Tulsa, Jackson 1, S 88, B B2, H&GN sur, 330 ft from e and w lines; 2, 330 ft from n and w lines. Texas Co., Wichita Falls, Williams 1, S 7, B 1, ACH&B sur, 230 ft from n and 1120 ft from w line; Davis 1, S 8, B 1, ACH&B sur, 2310 ft from n and 330 ft from e line. Gibson Oil Corp., Amarillo, Bowers 9, S 92, B B2, H&GN sur, 330 ft from n and e lines. R. R. Osborne et al, Amarillo, Morse 1, S 2, B 26, H&GN sur, 330 ft from s and w lines. Danciger O. & R. Co., Fort Worth, Morse 1, S 2, B 26, H&GN sur, 330 ft from s and e lines.

GRAYSON COUNTY—J. M. Burnham, Ft. Worth, Texas Nurseries 1, J. Strickland sur, se corner.

HOWARD COUNTY — Magnolia, Dallas, Roberts 7, S 136, B 29.

HARRIS COUNTY—M. J. Bashara & Sons, Wichita Falls, Fee 2, Jones sur, 125 ft w of No. 1. E. C. Crain et al, Humble, McDonald 1, Jas. Strange sur, 280 ft from e and 70 ft from s line.

HASKELL COUNTY — Phillips Pet. Co., Bartlesville, Okla., Moeller 1, S 3, J. Mathis sur, 452 ft from n and 1708 ft from e line.

HARDIN COUNTY — Paraffine Oil Co., Houston, Fee 71, 50 ft from n and w lines.

HARRISON COUNTY—State Line O. & G. Co., Shreveport, La., Waterman 6, E. Pollock sur, 150 ft from n and w lines.

JEFFERSON COUNTY—Haile Oil Co., Beaumont, Gladys 1, J. A. Veatch sur, 40 ft from n and 56 ft from e line. R. W. Abbott, Beaumont, American Land Co. 1, B 33, Gladys sur, center. Yount-Lee Oil Co., Beaumont, McFaddin 58, P. Humphreys sur, 890 ft from e and 1172 ft from n line; 57 640 ft from e and 1107 ft from n line. Unity Oil Co., Beaumont, McFaddin 96, P. Humphreys sur, 500 ft from nw and 590 ft from ne line. Freeport sulphur Co., Freeport, Texas Exploration Co. 10, S. Eaton sur, 300 ft w of center of e line.

JACK COUNTY—Majors, Fondren & Herrin, Weatherford, Herron 3, G. Simon sur, 300 ft s of No. 2. C. W. Bland, Jackboro, Keith 1, G. J. Keith sur, 100 ft from s and w lines. H. D. Conley, Abilene, Simpson 1, W. Landridge sur, 1000 ft from w and 150 ft from n line. Amerada Pet. Corp., Cisco, Crawford 1, W. McDonald sur, 250 ft from nw and 3560 ft from sw line.

JIM HOGG COUNTY—Magnolia Pet. Co., Dallas, Merchant's Bank 35, No. 415 F. M. Brister sur, 400 ft s of No. 31.

LIMESTONE COUNTY—Why-Not Oil Co., Mexia, Lewis 1, P. Varela sur, south central; 2, north central.

LAMPASAS COUNTY—Rumley O. & D. Co., Lampasas, Brooks 1, W. J. Elliott sur, sw corner.

MIDLAND COUNTY — H. Zweifel, Fort Worth, Shoup 1, S 34, B 41, T&P sur, center.

MATAGORDA COUNTY—Rycade O. Corp., Houston, Nash 13, T. Allsberry sur, (Brazoria County); Hudson 1, B 22, H. Parker sur, 800 ft from n and 400 ft from w line.

McCULLOCH COUNTY—C. C. Van Bebber, Mercury, Pumphrey 4, No. 848 G. R. Glenn sur, 900 ft e of center of w line. Kantex Oil Co., Fort Worth, Scoggins 1, S 280, H&TC sur, 300 ft from s and e lines.

NAVARRO COUNTY—Thelma Young Corsicana, Chewing 8, J. Peoples sur, 800 ft from s and e lines.

PECOS COUNTY — Harold Stanley, Fort Worth, Parsell 1, S 28, GC&SF sur, center. California Co., Colorado, Smith 12, S 35, B 194, GC&SF sur, 581 ft sw of No. 11. Phillips Pet. Co., Bartlesville, Okla., Heyman 1, S 8, B 125, T&St.L. sur, 330 ft from s and e lines. Mid-Kansas O. & G. Co., Tulsa, Okla., Smith-Taylor 14, S 33, B 194, GC&SF sur, 708 ft from n and 1262 ft from w line; 13, 1166 ft from n and 990 ft from w line.

REAGAN COUNTY—Marland Oil Co., Fort Worth, University 1, S 26, B 8, 330 ft from s and e lines.

SHACKELFORD COUNTY—Nash & Windfohr Oil Co., Graham, Meberly 1, S 13, B 11,

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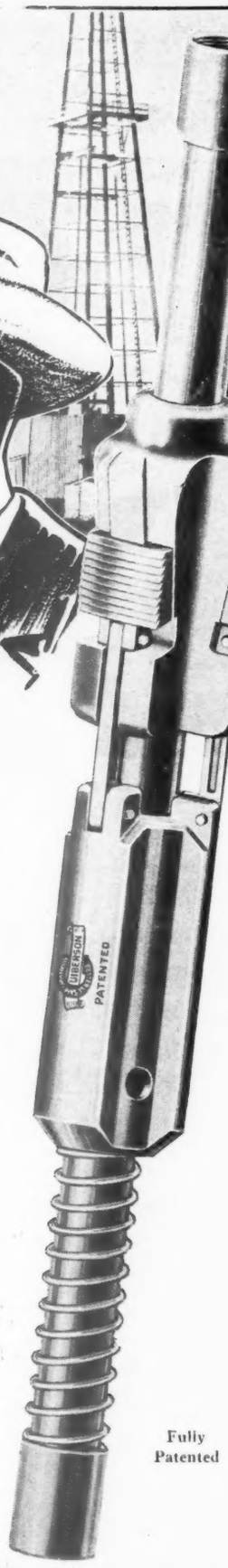

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Only the GUIBERSON Catcher has the three features necessary for dependable functioning under all conditions, namely: (1) dovetail tracks for slips; (2) a *strong* spring; (3) a *heavy* striker weight. Each GUIBERSON Catcher is tested at the factory by dropping the catcher alone in an empty casing. Every one must catch within 3 inches.

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BETTER BE SAFE THAN SORRY

Say you saw it in The OIL WEEKLY

T&P sur, 150 ft from w and 450 ft from s line. E. L. Stratton, Ft. Worth, Brayles 2, S 17, LAL sur, 1470 ft from n and 220 ft from e line. Wylie & Dunigan, Albany, Mathew 1, S 58, ET Ry sur, 450 ft from e and 150 ft from s line. Midland Oil Co., Ft. Worth, Elliott 1, S 9, LAL sur, 150 ft from n and w lines. B. E. Wilson, Del Rio, Broyles 7, S 14, LAL sur, 600 ft from e and 150 ft from s line. L. C. Meltzel et al, Cisco, Reynolds 1, S 30, B 11, T&P sur, 150 ft from s and w lines. R. F. Gilman et al, Cisco, Davis 1, S 13, B 12, T&P sur, 150 ft from e and 830 ft from s line. J. P. Harris, Mineral Wells, English 5, 542 TE&L sur, 300 ft se of No. 2.

TAYLOR COUNTY—C. C. Cady, Moran, Burns 2, S 68, LAL sur, 450 ft from n and 150 ft from w line.

WICHITA COUNTY—Bridwell & Mayfield et al, Wichita Falls, Sparks 1, CT Ry sur, 450 ft from w and 150 ft from n line. Maxwell & Newton, Wichita Falls, Chilson 1, B 4, DCSL sur, 300 ft from w and 150 ft from s line. Perkins & Cullum, Wichita Falls, Beaver-Electra 9, S 11, HT&B sur, north central. Wolfe & Grayce Oil Co., Wichita Falls, Daume 2, No. 1 SP Ry sur, 150 ft from s and e lines. W. B. Omohundro, Wichita Falls, Murray 3, H. B. Balch sur, 450 ft from n and w lines. S. H. Walton, Wichita Falls, Williams 1, S 23, H&GN sur, 334 ft from n and 1050 ft from w line. Bleakley & Kennison, Wichita Falls, Rexford 8, CT Ry sur, 350 ft w of center of e line. Atlantic Oil Prod. Co., Dallas, Barton 2, W. H. Spillers sur, 150 ft from n and 750 ft from w line. Petroleum Prod. Co., Wichita Falls, (Wilbarger County), Waggoner 3, S 16, B 4, H&TC sur, 200 ft from n and w lines; 4, 183 ft from n and 255 ft from e line. Cotton & Grayce Oil Co., Wichita Falls, Kemp & Kempner 14, WVFL sur. Magnolia, Dallas, Reilly 138, L. C. Dennison sur, 500 ft n of No. 134. Clark & Grayce Oil Co., Wichita Falls, Fee 15A, Ward & Todd sur, 150 ft from e and 450 ft from s line. J. E. Dunnaway et al, Wichita Falls, Waggoner 6, S 33, B 5, H&TC sur, 300 ft s of No. 5. Continental Oil Co., Wichita Falls, Bailey 3, H, Hastie sur, 860 ft e of No. 2.

WINKLER COUNTY — Independent O. & G. Co., Midland, Vardeman 5, S 41, B B5, School sur, 330 ft from w and 990 ft from s line. Republic Prod. Co., San Angelo, Hendrick 5, S 41, B B5, School sur, 330 ft from n and e lines. Southern Crude Oil Purchasing Co., Shreveport, La., Hendricks 1, S 42, B B5, 2310 ft from n and 330 ft from e line; 2, 2310 ft from s and 330 ft from e line. Independent O. & G. Co., Midland, Hendricks 4, S 34, B B5, School sur, 330 ft from e and 990 ft from s line; 3, 990 ft from n and 330 ft from e line. Humble, Wichita Falls, I Hendricks 1, S 32, B 26, 330 ft from s and e lines; I. Hendricks 4, S 29, B B5, 321 ft from e and 275 ft from s line; J. B. Walton B1, S 47, B 26, 330 ft from s and e lines; J. B. Walton A1, S 48, B 26, 330 ft from n and w lines; T. G. Hendrick 10, S 41, B B5, 660 ft n of No. 6; T. G. Hendrick 9, S 34, 330 ft from n and 283 ft from e line. Landreth Prod. Corp., Breckenridge, T. G. Hendricks 4, S 29, B B5, 330 ft from n and e lines; 3, 660 ft s of No. 4. Cranfill & Reynolds, Cisco, I. Hendricks C2, S 33, B 26, 330 ft from s and e lines. Roxana, South Bend, T. G. Hendricks D4, S 41, B B5, School sur, 330 ft from n and e lines; D5, 990 ft from w and 330 ft from s line; D6, 990 ft from e and 330 ft from s line. Atlantic Oil Prod. Co., Dallas, Hendricks D3, S 29, B B5, 1650 ft from n and w lines; D4, 990 ft from w and 1650 ft from n line.

WILBARGER COUNTY — C. P. Burton, Wichita Falls, Waggoner 1, J. D. Purnell sur, 150 ft from n and 450 ft from e line. Petroleum Prod. Co., Wichita Falls, Waggoner A-3, S 16, B 4, H&TC sur, 200 ft from n and w lines; A-4, 183 ft from n and 255 ft from e line. C. W. Boller, Wichita Falls, Waggoner 1, S 27, B 4, H&TC sur, 1120 ft from n and 200 ft from w line. Milham Corp., San Antonio, Waggoner 18, S 31, B 4, H&TC sur, 1935 ft from n and 150 ft from e line. Lain McG[illegible] Oil Corp., Wichita Falls, Waggoner 3, S 4, B 4, H&TC sur, 300 ft sw of No. 2; 2, 295 ft from s and e lines. Jeffers & Jeffers, Wichita Falls, Waggoner 1, S 57, H&GN sur, 150 ft from n and e lines.

WEBB COUNTY—Cole Pet. Co., Laredo, Benavides 53, S 41, B 3, GC&SF sur, 160 ft from s and e lines.

WHARTON COUNTY — J. S. Abercrombie Co., Houston, Woytek 5, S. F. Austin sur, 160 ft w of No. 1.

WHEELER COUNTY—Pendleton & Vaughan, Shamrock, George 1, S 96, B 17, H&GN sur, center.

YOUNG COUNTY—Texas Pacific Coal & Oil Co., Ranger, Donnell 5, 1211 TE&L sur, 250 ft from n and 200 ft from e line. Robert Oil Corp., Breckenridge, Burk 1, S 4, SP Ry sur, 1250 ft from n and 1350 ft from w line. Panhandle Ref. Co., Wichita Falls, Pitman 1, W. Mathews sur, 150 ft from n and 405 ft from w line. G. A. Gifford, Abilene, Miller 3, A. Rohus sur, 1150 ft from w and 150 ft from s line. R. C. Parker, Graham, Newman 1, S. Salee sur, 150 ft from s and 1150 ft from e line. T. E. Seigler, Olney, Bloodworth 1, 214 TE&L sur, 150 ft from s and e lines. J. C. Cunningham, Loving, Boone 1, BBB&C sur, 150 ft from n and w lines. H. B. Alexander, Loving, Johnson 2, B 15, E. W. Sargent sur, 150 ft from n and 450 ft from w line.

ARKANSAS

OUACHITA COUNTY—Ohio Oil Co., Cramer 7, 22-15-16, 330 ft n and 330 ft e of swc.

UNION COUNTY—Grimes Bro.'s Hill 2, 7-18-14, 300 ft n and 300 ft w of sec ne ne. Mellon Tr.'s Van Hook 1, 7-18-14, 330 ft n and 330 ft w of sec sw ne.

OKLAHOMA

CARTER COUNTY — Schermerhorn et al, Crockett 3, se sw nw 23-1s3w. Magnolia, Gabriel 2, se nw sw 23-1s-3w.

CREEK COUNTY—Wilcox O. & G. Co., Dixon 5, nec sw 18-14-10e. W. Hammond et el, Peeper 1A, nec nw 10-16-10e. Kennedy, Horner et al, Burnett 3, nwc sw sw 24-18-11e. Independent O. & G. Co., Tahkaney 1, sec ne se 7-19-9e.

GRADY COUNTY — Wirt Franklin Oil Corp., Garden 1, se nw ne 1-4n-7w. Commercial Dev. Co., Crisman 1, c ne ne 21-4n-7w. Okla. Nat. Gas Co., Farwell 5, nwc sw se, 23-5n-8w.

HUGHES COUNTY — Transcontinental Oil Co., Diamond 1, sec nw 6-8-10e.

KAY COUNTY—Mummert Drlg. Co. et al, Harris 1, swc se 27-27-3e. Industrial O. & G. Co., Walker 1, c ne ne 2-27-1w. Ingram & Wilson, Johnson 1, swc ne 36-28-1w.

LOGAN COUNTY—Roxana, Sebranek 2, nec 30-19-4w; Ross 1, swc 20-19-4w; Ross "B" 1, sec 19-19-4w; Rouse "B" 1, nec 19-19-4w.

MURRAY COUNTY—Gilcrease et al, Wolf 1, ne se se 20-1n-2e.

MUSKOGEE COUNTY—P. Boyle et al, C. Simmons 2, cwl sw ne 10-15-15e.

OKFUSKEE COUNTY—J. J. Deaner et al, Grayson 3, ne se sw 3-12-11e.

OKMULGEE COUNTY — Roach & Love, Kennedy 2, sec ne 15-15-12e. B. Morgan, Myers 1, sec sw 11-11-13e. Denver Producers & Refiners, Thams 7, cnl sw ne 32-13-11e.

OSAGE COUNTY—Davis & Wright, No. 1, nw ne sw 5-21-9e. Standish Oil Co., 7, nec nw sw se 2-25-11e. Lewis Prod. Co. 6, se nw sw 2-26-6e. Osage Gas Prod. Co. 385, sec sw nw 5-27-11e.

PONTOTOC COUNTY—C. B. Shaffer, Yoakum 5, swc 9-5n-8e. American O. & R. Co., Brown 1, swc se 27-5n-6e.

POTTAWATOMIE COUNTY—Continental Oil Co., Noghnguit 5, nec nw 19-7-4e. Continental Oil Co., Neghnguit 4, se ne nw 19-7-4e. Pierce Oil Corp., Davis 2, sw se ne 25-7-3e. Margnolia Pet. Co., Harper 2, nec sw 25-7-3e. Gypsy Oil Co., Sullivan 2, sw ne se 25-7-3e. Geo. W. Boles, Rawley 1, sec nw 25-7-3e.

SEMINOLE COUNTY—I. T. I. O. Co., House "B" 4, 2-7-6e. The Texas Co., Coker 4, sw nw sw 1-7-6e. Larkin et al, Cluck 1, ne nw nw 4-9-6e. Roxana Pet. Corp., Hearn 2, sw ne nw 13-9-5e. The Texas Co., Anderson 8, ne nw se 2-9-5e.

SEQUOYAH COUNTY—Citizens Gas Co., Greenstreet 1, swc ne se 33-12-27e.

STEPHENS COUNTY — Turman Oil Co., Burke 1, nwc 4-2s-8w. Magnolia Pet. Co., Harris 5, nec se nw sw 36-1s-5w. Hupp & Duff, nwc sw nw ne 34-1s-8w. Fisher & Rankin, Callahan 1, csl se se 21-1s-8w. Magnolia Pet. Co., Bartley 2, nwc 20-1s-8w. Skelly Oil Co., Krebbs 7, se sw se 13-1s-4w. Wirt Franklin Pet. Corp., Brittain 4, nw sw se 12-1s-4w.

TULSA COUNTY—Jackson & Wise, Warrior 1A, swc nw ne 21-19-12e. Glidden Oil Corp., River Bed 1, nec nw nw se 15-19-11e.

KANSAS

CHAUTAUQUA COUNTY — Griffeth, Bell et al, Chaffine 1, swc ne 1-32-10e.

COWLEY COUNTY—Shawver et al, Mulleet 1, c nw se 31-34-3e.

ELK COUNTY—Truby et al, Silger 1, sec ne se 25-30-10e. Pennock Oil Co., Faulk 1, nec sw 36-30-10e. Union Gas Corp., Webb 23, c ne nw 14-31-10e. Blaudell Oil Co., Baker 2, cnl nw nw 28-31-10e. Denman Bros., Warren 2, swc 36-31-10e.

GREENWOOD COUNTY—Darby Pet. Co., Schwab 7, sec sw nw 30-22-13e; Schwab 8, swc se nw 30-22-13e. Transcontinental Oil Co., Fankhauser 1, nec nw 2-23-12e. Reed & Wilson, House 1, nec sw sw 28-26-9e. Mohawk Oil Co., Cross 2, nec sw ne 7-27-11e.

MARION COUNTY—Crawford et al, Weston 1, nec nw sw se 14-17-4e.

POTTAWATOMIE COUNTY—Shaw et al Washington 1, sec lot 17, 7-9-8e.

RUSSELL COUNTY—Midwest Explo. Co., Austin 33, sec sw se 20-12-15w. Keyes Pet. Co., Baxter 1, swc se se 32-13-15w; Baxter 2, nwc se se 32-13-15w; Mermis 1, sec sw ne 32-13-15w. Mid West Explo. Co., Mermis 4, nec nw se 32-13-15w. Streeter & Stearns, Gorham 1, swc ne 33-13-15w. Keyes Pet. Co., Mermis 1, nwc sw sw 33-13-15w.

SUMNER COUNTY — Roxana Pet. Corp., Barnes 1, nec sw sw 14-32-2e.

TREGO COUNTY—Central Commercial Oil Co., Ellis-King 1, nec sw ne 20-13-21w.

WABUNSEE COUNTY — Doric Oil Co., Jones 1, nec sw 24-11-10e.

CALIFORNIA

HUNTINGTON BEACH — Southern Calif. Drlg. Co., 1, 2-6-11.

KERN FRONT—Chanslor-Canfield Midway Oil Co., 18, 23-28-27. Standard Oil Co., 21, 15-28-27. George F. Getty, Inc., McDougall 5, 26-28-27.

KERN COUNTY—W. W. Stabler, 1, 23-32-29.

LOMPOC—Union Oil Co., Purisima 19, 8-34.

LONG BEACH—Richfield Oil Co., Denni 7, 29-4-12; M-D 3, 19-4-12. Shell Co., F. C. 2, 29-4-12; Brown 1, 29-4-12; Binkley 4, 29-4-12; Horsch 3, 29-4-12. Travis Drilling Co., Travis 3, 19-4-12. McKeon Drilling Co., Conklin 1, 29-4-12. Dabney-Johnston Oil Corp., 9, 29-4-12.

LOS ANGELES COUNTY—D. H. Wood, 1, 5-7-10.

ORANGE COUNTY—Ohio Oil Co., GBM 1, 9-4-11.

RINCON—General Pet. Corp., Hobson A-2, 8-3-24.

ROUND MOUNTAIN—Elbe Oil Land Dev. Co., 94, 20-28-29.

SAN BENITO COUNTY—Betabel Fruit Farms, 1-A, sub B, lot 6, Rancho San Antonio.

VENTURA—Associated Oil Co., Lloyd 54, 27-3-23.

LOUISIANA

BIENVILLE PARISH—Humble, Houston, Anderson 1, 29-18n-5w, 660 ft n and 660 ft w of se c.

BOSSIER PARISH—R. O. Roy, Shreveport, W. A. Caplis 7, 25-16n-12w, 1104 ft e and 603 ft s of nw c.

CADDO PARISH—The Texas Co., Shreveport, Hutchinson 5, 15-15n-12w, 840 ft s and 200 ft e of nw c.

CAMERON PARISH—Yount-Lee Oil Co., Beaumont, State Land 6, 36-12s-10w, 297 ft n and 352 ft e of sw c; State Land 8, 36-12s-10w, 240 ft n and 162 ft e of sw cor of sec.

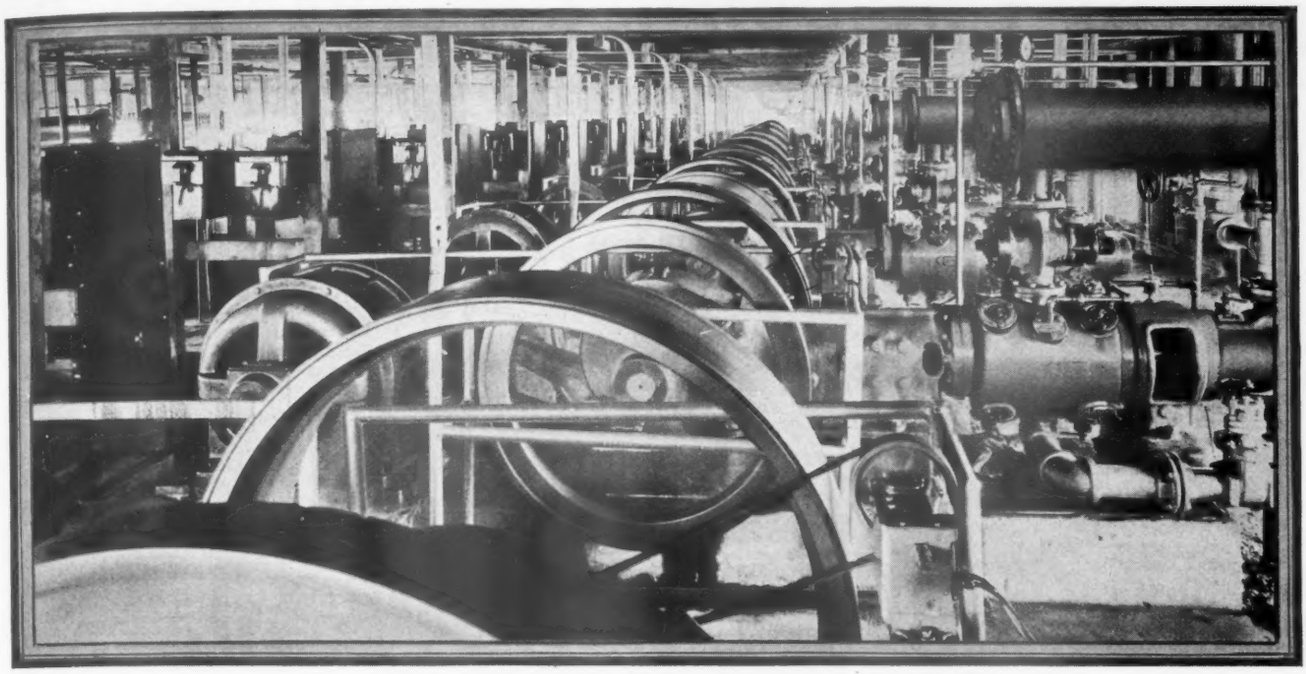
CATAHOULA PARISH—D. R. Buchanan, Washington, Pa., Knotts 1, 32-11n-8e, 662 ft n and 494 ft w of se c ne.

LA SALLE PARISH—Wingfield, Dobie & Wilson, El Dorado, Ark., Gibson 3, 2-9n-1e, 330 ft n and 330 ft e of sw c sw se.

MOREHOUSE PARISH — United Carbon Co., Monroe, Bastrop Pulp & Paper Co. 1, 18-21n-6e, 660 ft n and 660 ft e of sw c se.

OUACHITA PARISH — Ouachita Natural Gas Co., Inc., Monroe, Smith 9, 29-20n-4e, 230 ft n and 25 ft e of nw c sec. 38 in sec. 29.

WEBSTER PARISH — Humble, Houston, Webb 2, 14-21n-10w, 1980 ft n of se c.



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Say you saw it in The OIL WEEKLY

CRUDE OIL PRICE QUOTATIONS

CURRENT POSTINGS

(For current changes see page 16)

EASTERN STATES

	Feb. 22 1928
New York Transit	$2.80
Bradford District	2.80
National Transit	2.65
Southwest	2.65
Eureka	2.60
Buckeye	2.35
Macksburg	2.80
Gaines	2.60
Somerset	1.60
Cabell	1.50
Ragland	.95
Corning, 35-cent grade	1.45
Corning, 25-cent grade	1.55
Keister	1.10

CENTRAL STATES

Illinois	1.60
Indiana	1.32
Lima	1.56
Plymouth	1.33
Princeton	1.60
Waterloo	1.35
Wooster	1.57

WESTERN KENTUCKY

Posted by Stoll Refining Company for crude from Allen, Warren, Franklin, Davies, Barren, All grades 1.50

MID-CONTINENT

Prairie, Sinclair and Gulf

28 to 28.9 gravity	1.12
29 to 29.9 gravity	1.14
30 to 30.9 gravity	1.16
31 to 31.9 gravity	1.18
32 to 32.9 gravity	1.20
33 to 33.9 gravity	1.22
34 to 34.9 gravity	1.24
35 to 35.9 gravity	1.26
36 to 36.9 gravity	1.28
37 to 37.9 gravity	1.30
38 to 38.9 gracity	1.32
39 to 39.9 gravity	1.34
40 to 40.9 gravity	1.36
41 to 41.9 gravity	1.38
42 to 42.9 gravity	1.40
43 to 43.9 gravity	1.42
44 to 44.9 gravity	1.44
45 to 45.9 gravity	1.46
46 to 46.9 gravity	1.48
47 to 47.9 gravity	1.50
48 to 48.9 gravity	1.52
49 to 49.9 gravity	1.54
50 to 50.9 gravity	1.56
51 to 51.9 gravity	1.58
52 and above	1.60

NORTH AND CENTRAL TEXAS

Ranger, North Texas, Mexia, Powell, Richland, Wortham, Currie, Moran, Nocona and Lytton Springs Crude

(Humble Oil and Refining Company)

	Feb. 22 1928
Below 25 gravity	.76
25 to 25.9 gravity	.81
26 to 26.9 gravity	.86
27 to 27.9 gravity	.91
28 to 28.9 gravity	.96
29 to 29.9 gravity	1.01
30 to 30.9 gravity	1.06
31 to 31.9 gravity	1.11
32 to 32.9 gravity	1.16
33 to 33.9 gravity	1.19
34 to 34.9 gravity	1.22
35 to 35.9 gravity	1.25
36 to 36.9 gravity	1.28
37 to 37.9 gravity	1.31
38 to 38.9 gravity	1.34
39 to 39.9 gravity	1.37
40 to 40.9 gravity	1.40
41 to 41.9 gravity	1.43
42 to 42.9 gravity	1.46
43 to 43.9 gravity	1.49
44 and above	1.52

NORTH AND CENTRAL TEXAS

(The Texas Company and Magnolia Petroleum Company)*

24 to 24.9 gravity	.76
25 to 25.9 gravity	.81
26 to 26.9 gravity	.86
27 to 27.9 gravity	.91
28 to 28.9 gravity	.96
29 to 29.9 gravity	1.01
30 to 30.9 gravity	1.06
31 to 31.9 gravity	1.11
32 to 32.9 gravity	1.16
33 to 33.9 gravity	1.19
34 to 34.9 gravity	1.22
35 to 35.9 gravity	1.25
36 to 36.9 gravity	1.28
37 to 37.9 gravity	1.31
38 to 38.9 gravity	1.34
39 to 39.9 gravity	1.37
40 to 40.9 gravity	1.40
41 to 41.9 gravity	1.43
42 to 42.9 gravity	1.46
43 to 43.9 gravity	1.49
44 to 44.9 gravity	1.52
45 to 45.9 gravity	1.55
46 to 46.9 gravity	1.58
47 to 47.9 gravity	1.61
48 to 48.9 gravity	1.64
49 to 49.9 gravity	1.67

	Feb. 22 192x
50 to 50.9 gravity	1.70
51 to 51.9 gravity	1.73
42 and above	1.76

* Magnolia Petroleum Company posts the schedule below on oil below 30 gravity and from 30 gravity up to 31.9. Beginning with 32 to 32.9, Magnolia's posting is the same as that of The Texas Company.

Below 30 gravity	.75
30 to 30.9 gravity	.90
31 to 31.9 gravity	1.05

Corsicana heavy is $1.00 posted by Magnolia.

SOUTH TEXAS

Mirando 1.00

SOMERSET

Grayburg

Below 33 gravity	1.05
33 to 33.9 gravity	1.07
34 to 34.9 gravity	1.09
35 to 35.9 gravity	1.11
36 to 36.9 gravity	1.13
37 to 37.9 gravity	1.15
38 and above	1.17

GULF COAST

Grade "A" all companies	1.20
Gulf Coast Light Oil, below 25	1.15
25 to 25.9 gravity	1.17
26 to 26.9 gravity	1.19
27 to 27.9 gravity	1.21
28 to 28.9 gravity	1.23
29 to 29.9 gravity	1.25
30 to 30.9 gravity	1.27
31 to 31.9 gravity	1.29
32 to 32.9 gravity	1.31
33 to 33.9 gravity	1.33
34 to 34.9 gravity	1.35
35 to 35.9 gravity	1.37
36 to 36.9 gravity	1.39
37 to 37.9 gravity	1.41
38 to 38.9 gravity	1.43
39 to 39.9 gravity	1.45
40 and above	1.47

*Humble Oil & Refining Company's postings on Gulf Coast Light stop at 35 to 35.9. Its price on all crudes above 35 to $1.37 per barrel.

Magnolia Petroleum Company's postings stop at 31 to 31.9.

MARKHAM

The Texas Company

All grades 1.00

LULING

All grades 1.00

CALIFORNIA CRUDE OIL PRICES AT THE WELL

Following are the current prices offered by Standard Oil Company for crude oil at the well: (Price per barrel of 42 gallons in fields indicated.)

Gravity (degrees)	Signal Hill	Seal Beach	Huntington Beach	Inglewood	Olinda-Brea Canon	Athens-Rosecrans Dominguez	Torrance	Richfield	Whittier La Harbra		Coyotte Hill	Santa Fee Springs	Newhall McKittrick Kern River	Midway Sunset Elk Hills	Buena Vista Hills	Lost Hills	Coalinga	Wheeler
14-14-9	$ .85	$ .85	$ .85	$ .85	$ .85	$ ..	$ .85	$ .85	$ .85	$ .85	$ .85	$ ..	$ .75	$ .75	$ .75	$ .75	$ .75	$ .75
15-15-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
16-16-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
17-17-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
18-18-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
19-19-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75
20-20-9	.85	.85	.85	.85	.85	..	.85	.85	.85	.85	.85	..	..	.77	.77	.77	.76	.76
21-21-9	.86	.86	.86	.86	.86	..	.86	.86	.85	.85	.86	.85	..	.79	.79	.79	.77	.77
22-22-9	.87	.87	.87	.87	.87	..	.87	.87	.85	.85	.87	.85	..	.81	.81	.81	.78	.78
23-23-9	.88	.88	.88	.88	.88	..	.88	.88	..	.85	.88	.85	..	.83	.83	.83	.79	.79
24-24-9	.89	.89	.89	.89	.89	..	.89	.89	..	.85	.89	.85	..	.85	.85	.85	.80	.80
25-25-9	.90	.90	.90	.90	.90	.90	.90	.90	..	.86	.90	.86	..	.87	.87	.87	.81	.81
26-26-9	.92	.92	.92	.92	.92	.92	.92	.92	..	.87	.91	.87	..	.89	.89	.89	.83	.82
27-27-9	.94	.94	.94	.94	.94	.94	.94	.94	..	.88	.92	.88	..	.91	.91	.91	.85	.83
28-28-9	.96	.96	.96	.96	.96	.96	.96	.96	..	.89	.93	.89	..	.93	.93	.93	.87	..
29-29-9	.98	.98	.98	..	.98	.98	..	1.00	..	.91	.95	.93	..	.99	.99	.99	.91	..
30-30-9	1.00	1.00	1.00	..	1.00	1.00	..	..	..	..	..	.95	..	1.02	1.02	1.02	.93	..
31-31-9	1.03	1.03	1.03	..	..	1.03	..	..	..	..	..	.97	..	1.05	1.05	1.05	.95	..
32-32-9	1.06	1.06	1.06	..	..	1.06	..	..	..	..	..	.99	..	1.08	1.08	1.08	.97	..
33-33-9	..	..	..	..	..	1.09	..	..	..	..	..	1.01	..	..	..	1.11	.99	..
34-34-9	..	..	..	..	..	1.12	..	..	..	..	..	1.03	..	..	..	..	1.01	..
35-35-9	..	..	..	..	..	1.15	..	..	..	..	..	1.06	..	..	..	..	..	..
36-36-9	..	..	..	..	..	1.18	..	..	..	..	..	1.09	..	..	..	..	..	..
37-37-9	..	..	..	..	..	1.21	..	..	..	..	..	1.12	..	..	..	..	..	..
38-38-9	..	..	..	..	..	1.24	..	..	..	..	..	1.15	..	..	..	..	..	..
39-39-9	..	..	..	..	..	1.27	..	..	..	..	..	..	..	..	..	..	..	..
40-40-9	..	..	..	..	..	1.30	..	..	..	..	..	..	..	..	..	..	..	..
41-41-9	..	..	..	..	..	1.33	..	..	..	..	..	..	..	.	.	..	..	..
42-42-9	..	..	..	..	..	1.36	..											

In accord with the "Official Oil Doctor's" analogy

THE "Petreco" electrical process for the dehydration of crude oil emulsions will emphatically bring "cut oil" production to pipe line requirements and divert former losses into legitimate and permanent profits. "Petreco" is not an "added expense," but a dividend paying source from the day it is installed. Constructed on the unit system, it is readily adaptable for installation on small wells with additional units quickly available as production increases.

Safe, efficient, dependable, trustworthy.

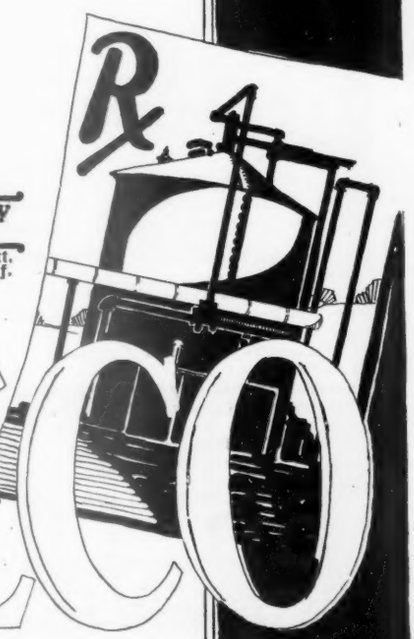
Retrench lost "cut oil" profits with "Petreco."

Write for our book, "The Electrical Process for the Dehydration of Crude Oil Emulsions." It will prove a revelation.

PETROLEUM RECTIFYING COMPANY OF CALIFORNIA

Security Title Insurance Bldg. 530 West 6th Street, Los Angeles, Calif.

Petroleum Bldg. Houston, Texas



PETRECO

PANHANDLE

GRAY COUNTY

(Humble Oil and Refining Company and Magnolia Petroleum Company)

	Feb. 22 1928
Below 27 gravity	.60
27 to 27.9 gravity	.65
28 to 28.9 gravity	.70
29 to 29.9 gravity	.75
30 to 30.9 gravity	.80
31 to 31.9 gravity	.85
32 to 32.9 gravity	.90
33 to 33.9 gravity	.93
34 to 34.9 gravity	.96
35 to 35.9 gravity	.99
36 to 36.9 gravity	1.02
37 to 37.9 gravity	1.05
38 to 38.9 gravity	1.08
39 to 39.9 gravity	1.11
40 to 40.9 gravity	1.14
41 to 41.9 gravity	1.17
42 to 42.9 gravity	1.20
43 to 43.9 gravity	1.23
44 and above	1.26

WHEELER COUNTY

(Humble Oil and Refining Company and Magnolia Petroleum Company)

Below 29 gravity	.60
29 to 29.9 gravity	.65
30 to 30.9 gravity	.70
31 to 31.9 gravity	.75
32 to 32.9 gravity	.80
33 to 33.9 gravity	.83
34 to 34.9 gravity	.86
35 to 35.9 gravity	.89
36 to 36.9 gravity	.92
37 to 37.9 gravity	.95
38 to 38.9 gravity	.98
39 to 39.9 gravity	1.01
40 to 40.9 gravity	1.04
41 to 41.9 gravity	1.07
42 to 42.9 gravity	1.10
43 to 43.9 gravity	1.13
44 and above	1.16

CARSON-HUTCHINSON COUNTIES

(Humble Oil and Refining Company and Magnolia Petroleum Company)

Below 31 gravity	.60
31 to 31.9 gravity	.65
32 to 32.9 gravity	.70
33 to 33.9 gravity	.73
34 to 34.9 gravity	.76
35 to 35.9 gravity	.79
36 to 36.9 gravity	.82
37 to 37.9 gravity	.85
38 to 38.9 gravity	.88
39 to 39.9 gravity	.91
40 to 40.9 gravity	.94
41 to 41.9 gravity	.97
42 to 42.9 gravity	1.00
43 to 43.9 gravity	1.03
44 and above	1.06

(Humble Oil & Refining Company)

Crane, Upton, Crockett and Pecos counties, all grades	.60

WEST TEXAS

(Humble, Gulf, Magnolia, Kay County Gas Company and Southern Crude Oil Purchasing Company)*

Crane, Crockett, Pecos, Upton and Winkler, Counties	.60

*Kay County Gas Company does not buy in Winkler and Pecos Counties, and Southern does not buy in Pecos or Crockett.

(Magnolia Petroleum Company)

Mitchell County	$ .93
Howard-Glasscock County (shallow)	.80
Howard-Glasscock County (deep)	.60

Col-Tex Refining Company

Howard and Mitchell Counties	$ .80

WYOMING-MONTANA

Wyoming

	Feb. 22 1928
Byron	1.33
Ferris	1.60
Elk Basin	1.33
Grass Creek	1.33
Rock Creek	1.25
Lost Soldier	.95
Lance Creek	1.33
Mule Creek	1.10
Notches	.65
Big Muddy	1.25
Osage	1.33
Hamilton Dome	.85
Pilot Butte	1.75
Torchlight-Greybull	1.33
Lander	.80
Simpson Ridge	.80
Rex Lake	1.10
South Casper Creek-Poison Spider	1.00

Salt Creek

Midwest Refining Company

29 to 29.9 gravity	1.14
30 to 30.9 gravity	1.16
31 to 31.9 gravity	1.18
32 to 32.9 gravity	1.20
33 to 33.9 gravity	1.22
34 to 34.9 gravity	1.24
35 to 35.9 gravity	1.26
36 to 36.9 gravity	1.28
37 and above	1.30

MONTANA

Sunburst	1.50
Cat Creek	1.33
Lake Basin	2.20

NEW MEXICO

Artesia	1.00
Hogback	1.38

CANADA

Oil Springs	2.02
Petrolia	1.95

LOUISIANA-ARKANSAS

(Standard of Louisiana)

Homer, Haynesville, Caddo, El Dorado, De Soto and Crichton

Below 28 gravity	.91
28 to 28.9 gravity	.96
29 to 29.9 gravity	1.01
30 to 30.9 gravity	1.06
31 to 31.9 gravity	1.11
32 to 32.9 gravity	1.16
33 to 33.9 gravity	1.19
34 to 34.9 gravity	1.22
35 to 35.9 gravity	1.25
36 to 36.9 gravity	1.28
37 to 37.9 gravity	1.31
38 to 38.9 gravity	1.34
39 to 39.9 gravity	1.37
40 to 40.9 gravity	1.40
41 to 41.9 gravity	1.43
42 to 42.9 gravity	1.46
43 to 43.9 gravity	1.49
44 to 44.9 gravity	1.52
45 to 45.9 gravity	1.55
46 to 46.9 gravity	1.58
47 to 47.9 gravity	1.61
48 to 48.9 gravity	1.64
49 to 49.9 gravity	1.67
50 to 50.9 gravity	1.70
51 to 51.9 gravity	1.73
52 and above	1.76

STEPHENS

(All Companies)

Below 28	.85
28 to 28.9 gravity	.87
29 to 29.9 gravity	.89
30 to 30.9 gravity	.91
31 to 31.9 gravity	.93
32 and above	.95

SMACKOVER

(All Companies)

Below 24 gravity	.75
24 and above	.90

Bellevue	1.25
Jennings	1.15
Vinton	1.30
Edgerly	1.30
Starks Dome	1.30
Urania	.75
Cotton Valley	.75
Calion	.75

IMPORTS OF PETROLEUM AT PRINCIPAL UNITED STATES PORTS

American Petroleum Institute Figures (Barrels of 42 gallons)

	February 11	February 4
AT ATLANTIC COAST PORTS—		
Baltimore	.....	54,000
Boston	.....	76,000
New York	744,000	928,000
Philadelphia	195,000	268,000
Others	88,000	*372,000
Total	1,027,000	1,698,000
Daily average	146,714	242,571
AT GULF COAST PORTS—		
Galveston District	47,000	65,000
New Orleans and Baton Rouge	40,000	140,000
Port Arthur and Sabine District	123,000	.....
Tampa	.....	.....
Total	210,000	205,000
Daily average	30,000	29,286
AT ALL UNITED TATES PORTS—		
Total	1,237,000	1,903,000
Daily average	176,714	271,857
Daily average four weeks ended	220,250	225,571

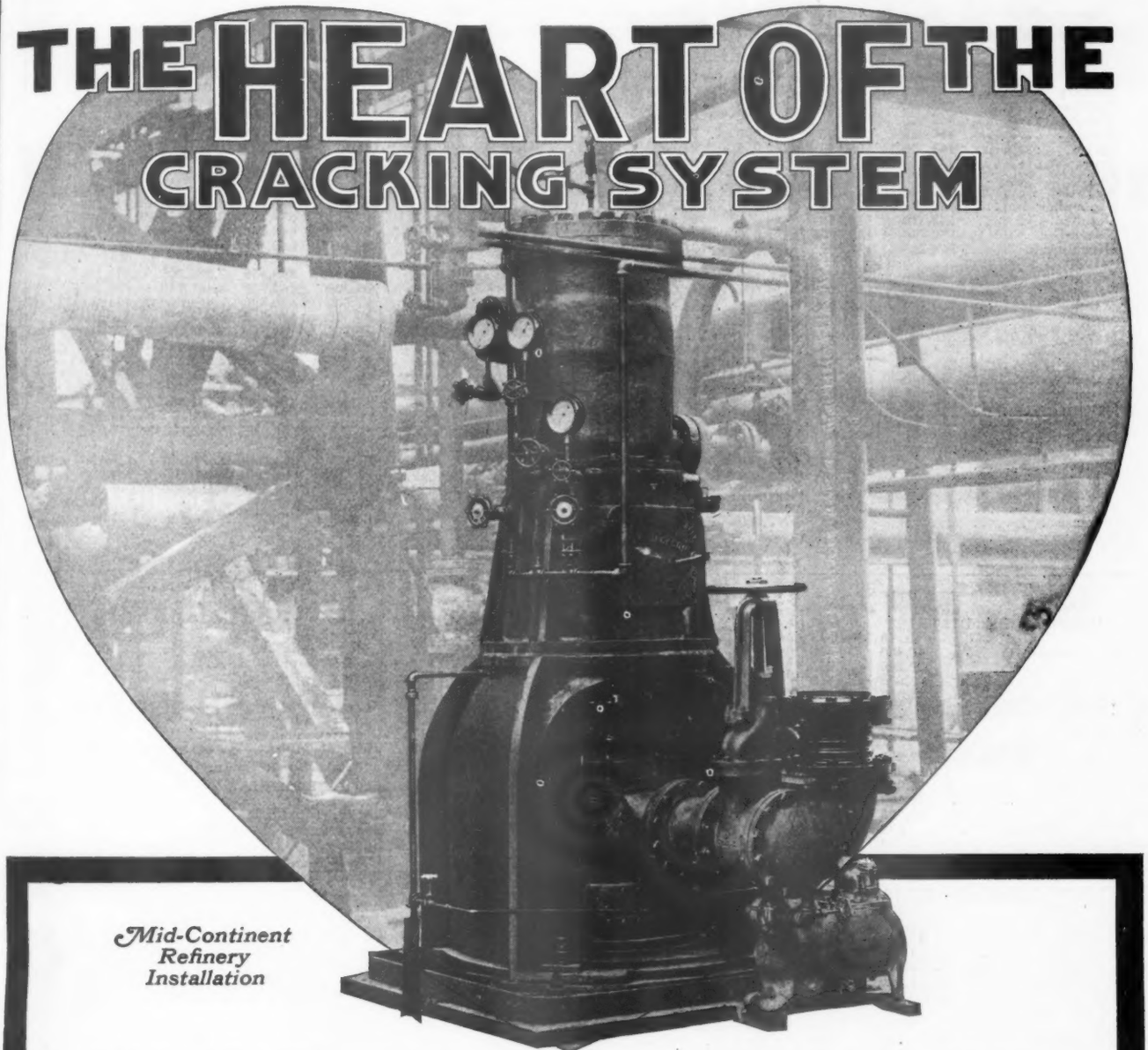
RECEIPTS OF CALIFORNIA OIL AT ATLANTIC AND GULF COAST PORTS

American Petroleum Institute Figures (Barrels of 42 gallons)

	February 11	February 4
AT ATLANTIC COAST PORTS—		
Baltimore	.....	110,000
Boston	.....	.....
New York	95,000	.....
Philadelphia	371,000	.....
Others	95,000	.....
Total	561,000	110,000
Daily average	80,143	15,714
AT GULF COAST PORTS—		
Daily average	.....	.....
Total Atlantic and Gulf Coast Ports	561,000	110,000
Daily average	80,143	15,714
Daily average four weeks ended	68,000	64,893
DISTRIBUTION OF TOTAL CALIFORNIA RECEIPTS IS AS FOLLOWS:		
Crude	152,000	.....
Gasoline	256,000	110,000
Kerosene	95,000	.....
Lubricating oil	58,000	.....
Total	561,000	110,000

*Revised.

THE HEART OF THE CRACKING SYSTEM



Mid-Continent Refinery Installation

Centrifugal Hot Oil Pumps, a pioneering achievement of the Byron Jackson Pump Manufacturing Company, are today recognized as the heart of the cracking system, revolutionizing refinery practice. Besides increasing the output of gasoline from 200 to 300 per cent, Byron Jackson Hot Oil Pumps have solved many refinery problems of long standing.

These pumps are noted for their safety in operation, dependability, absence of valves, continuous non-pulsating, uniform flow - no surges; direct connected prime mover - no gears; ample clearance between moving and stationary parts - no rubbing surfaces to wear or freeze; small floor space, no costly foundations; smaller first cost and low maintenance.

SINCE 1872

BYRON JACKSON PUMP MFG. CO.

Factories: BERKELEY, Los Angeles, Visalia

Branches: San Francisco, Portland, Salt Lake, Dallas, Phoenix

BYRON JACKSON

CENTRIFUGAL PUMPS FOR EVERY SERVICE

United States Daily Average Production

Figures below are taken from the complete revised estimates of the AMERICAN PETROLEUM INSTITUTE except for the current week, which are advance estimates issued by the A. P. I. and are subject to revision:

1926	Oklahoma	Kansas	Texas (Outside Gulf Coast)	Gulf Coast	North Louisiana	Arkansas	Eastern States	Rocky Mountain	California	United States Daily Ave.	United States Total
January	445,950	99,600	256,500	90,100	43,800	178,000	100,450	101,700	618,750	1,934,850	59,979,900
February	450,300	102,050	246,600	91,550	45,300	169,400	98,950	101,050	604,950	1,910,150	53,483,900
March	457,900	103,000	260,500	91,950	48,800	165,700	97,800	102,100	604,400	1,932,150	59,897,250
April	464,850	102,600	265,600	90,900	51,550	170,750	101,750	107,300	600,650	1,955,950	58,678,000
May	463,350	106,150	280,050	93,700	59,100	175,700	106,100	111,650	602,400	1,998,200	61,944,950
June	459,100	107,900	305,100	91,350	60,350	166,950	106,050	113,300	607,550	2,017,650	60,529,350
July	456,700	110,450	336,300	116,550	57,100	161,650	104,650	107,750	614,400	2,065,550	64,032,300
August	465,300	111,750	383,800	162,800	56,800	157,350	108,600	110,600	608,900	2,165,900	67,143,450
September	466,050	113,400	403,750	175,200	56,850	153,250	110,200	104,700	598,150	2,181,550	65,446,500
October	503,350	114,650	444,700	169,900	58,200	149,500	109,450	98,500	614,200	2,262,450	70,136,500
November	550,700	115,800	477,000	176,900	56,450	143,700	111,150	92,900	643,650	2,368,250	71,047,550
December	564,250	118,800	480,800	181,900	54,800	138,600	110,050	85,650	660,400	2,395,250	74,252,700
1927											
January	598,500	117,200	466,400	173,900	52,900	131,550	107,850	84,450	653,450	2,386,200	73,972,150
February	693,350	116,250	479,800	154,600	52,800	128,200	107,150	85,300	642,700	2,460,150	68,884,300
March	710,350	116,100	475,000	154,750	51,450	124,500	104,400	87,600	640,850	2,465,000	76,414,900
April	723,700	115,400	477,300	155,100	50,500	113,350	108,000	89,350	644,550	2,477,250	74,317,750
May	742,200	114,600	488,700	151,300	47,450	112,700	114,000	89,300	633,550	2,493,800	77,307,700
June	768,600	112,200	480,800	151,650	49,150	112,450	111,850	86,050	638,550	2,511,300	75,338,900
July	846,750	107,750	475,800	142,950	56,200	109,900	111,800	86,950	620,700	2,558,800	79,322,300
August	832,900	105,100	483,450	139,350	56,950	104,750	114,600	80,750	621,450	2,539,300	78,717,850
September	797,450	105,200	493,750	142,900	53,450	101,350	110,800	74,500	637,250	2,516,650	75,498,900
October	**782,300**	**105,100**	**497,900**	**138,400**	**51,300**	**100,450**	**113,600**	**73,250**	**629,000**	**2,491,300**	**77,230,000**
November	**766,900**	**106,650**	**501,750**	**138,100**	**49,400**	**97,850**	**114,900**	**75,050**	**623,850**	**2,474,450**	**74,233,500**
December	720,700	106,150	531,650	138,500	47,200	94,950	111,250	77,150	624,600	2,452,150	76,017,050
1928											
January	675,450	108,300	523,300	125,450	45,250	90,050	109,600	77,000	617,100	2,371,500	73,516,500
February 4	667,700	110,800	532,000	119,100	45,400	90,150	107,500	79,550	614,100	2,366,300	16,564,100
February 11	679,750	109,650	533,850	116,050	45,650	88,550	106,000	74,300	613,700	2,358,500	16,509,500
February 18	668,100	109,950	541,700	113,450	45,350	88,250	104,500	74,700	617,300	2,363,300	16,543,100
Increase	.....	300	7,850	.....	.....	.....	.....	400	3,600	4,800	33,600
Decrease	2,650	.....	.....	2,600	300	300	1,500	.....	.....	.....	.....

TEXAS

(Outside Gulf Coast)

PANHANDLE DISTRICT

	Feb. 18	Feb. 11
Hutchinson County	46,800	50,400
Gray County	20,800	22,050
Carson County	7,600	7,550
Wheeler County	1,000	1,200
Others	50	50
Totals	76,250	81,250

NORTH TEXAS

Burkburnett	12,550	12,100
Electra	11,250	10,750
Iowa Park-K-M-A	1,950	1,800
Wilbarger	10,100	10,050
Archer County	20,000	21,000
Clay County (Petrolia)	500	550
Baylor County	100	100
Montague and Cooke Cos.	12,950	14,000
Total	69,400	70,350

WEST CENTRAL TEXAS

Stephens County	7,500	7,150
Eastland-Desdemona	8,500	8,200
Brown County	13,000	14,000
Coleman County	1,500	1,000
Callahan County	3,900	3,800
Shakelford County	6,200	5,750
Young County	9,100	9,400
Throckmorton County	1,050	1,050
Jack County	1,450	1,400
Palo Pinto County	500	500
Others	500	500
Totals	53,200	52,750

WEST TEXAS

Jones County	1,200	1,200
Mitchell-Scurry Cos.	3,500	3,450
Howard County	5,200	6,900
Reagan County	20,500	21,100
Crane-Upton Counties	96,000	100,100
Crockett County	2,950	2,900
Pecos County	48,300	47,700
Winkler County	115,600	96,600
Others	2,500	2,400
Totals	295,750	282,350

EAST CENTRAL TEXAS

Mexia	7,600	7,750
Currie	500	600
Richland	500	600
Wortham	1,900	1,900
Corsicana-Powell	12,000	12,300
Nigger Creek	1,600	1,750
Totals	24,100	24,900

SOUTHWEST TEXAS

Luling	13,250	12,700
Lytton Springs	1,600	1,600
Somerset	800	800
Laredo District	6,400	6,200
Dale	550	550
Others	400	400
Totals	23,000	22,250
Total Texas (Outside Gulf Coast)	541,700	533,850

TEXAS GULF COAST

West Columbia	7,550	8,000
Damon Mound	900	900
Big Creek	1,900	1,950
Boling	1,950	2,000
Blue Ridge	4,500	5,100
Pierce Junction	8,750	8,800
Humble	1,600	1,600
Goose Creek	7,350	7,350
South Liberty	2,150	2,150
Hull	11,600	11,500
Saratoga	1,050	1,050
Batson	1,350	1,300
Sour Lake	3,650	3,500
Spindle Top	36,600	37,900
Orange County	4,400	4,500
Barbers Hill	650	650
Others	3,000	3,350
Totals	98,950	101,700
Texas Total	640,650	635,550

OKLAHOMA

North Braman	3,150	3,150
South Braman	1,800	1,950
Blackwell	3,800	3,800
Hubbard	3,000	3,100
Thomas	1,500	1,550
Tonkawa	15,800	15,400
Garber	9,950	9,950
Burbank	43,300	42,300
Osage (outside Burbank	29,550	29,600
Watchorn	1,000	1,150
Cushing	21,000	21,000
Yale Jennings	8,950	8,950
Davenport	2,350	2,400
Bristow Slick	24,900	24,550
North Okmulgee	15,850	15,850
Lyons Deaner	7,700	7,800
Stroud	1,100	950
Cromwell	10,350	10,400
Papoose	5,350	5,300
Wewoka	8,450	8,200
Seminole	58,050	58,350
Bowlegs	92,900	92,700
Searight	18,800	18,800
Little River	34,150	34,700
Earlsboro	114,600	119,000
Duncan District	6,600	6,650
Graham	5,750	5,750
Fox	1,700	1,700
Healdton	14,400	14,400
Hewitt	8,800	8,900
Scholem Alechem	13,900	14,000
Others	79,600	78,450
Totals	668,100	670,750

CALIFORNIA

Santa Fe Springs	38,000	38,000
Long Beach	118,000	117,000
Huntington Beach	60,000	60,000
Torrance	19,800	20,000
Dominguez	12,800	13,000
Rosecrans	7,500	7,800
Inglewood	30,500	30,500
Midway-Sunset	79,500	79,500
Ventura Avenue	54,000	51,500
Seal Beach	39,800	40,000
Others	157,400	156,400
Totals	617,300	613,700

KANSAS

Greenwood County	30,000	30,000
Florence-Covert	1,450	1,450
Peabody-Ebling	3,750	3,800
Eldorada-Towanda	14,250	14,250
Augusta-Fox Bush	4,200	4,250
Rainbow Bend	1,650	1,800
Russell	2,900	2,300
Churchill	12,350	12,500
Oxford	14,400	14,300
Others	25,000	25,000
Totals	109,950	109,650

NORTH LOUISIANA

	Feb. 18	Feb. 11
Homer	4,450	4,450
Haynesville	6,400	6,400
Caddo Light	11,550	11,850
Caddo Heavy	3,950	3,950
DeSoto-Red River	4,300	4,250
Elm Grove	550	550
Bellevue	1,000	950
Cotton Valley	4,500	4,550
Urania	7,950	8,000
Pleasant Hill	700	700
Totals North Louisiana	45,350	45,650

LOUISIANA GULF COAST

Vinton	4,600	4,750
Lockport	4,750	4,900
Evangeline	1,150	1,000
Edgerly	1,750	1,700
Others	2,250	2,000
Total La. Gulf Coast	14,500	14,350
Louisiana Total	59,850	60,000

ARKANSAS

El Dorado	5,150	5,050
Smackover Light	8,550	8,600
Smackover Heavy	67,950	68,350
Stephens	1,100	1,050
Nevada	1,800	1,850
Lisbon	2,350	2,400
Champagnolle	1,250	1,150
Others	100	100
Totals	88,250	88,550

MOUNTAIN STATES

WYOMING

[illegible]t Creek	38,500	38,700
Grass Creek	2,500	2,450
Elk Basin	1,150	1,000
Big Muddy	2,750	2,700
Lost Soldier	2,750	2,800
Rock River	2,700	2,550
Lance Creek	650	650
Others	3,350	3,350
Totals	54,350	54,200

MONTANA

Cat Creek	1,800	1,800
Sunburst	8,500	8,500
Others	150	150
Totals	10,450	10,450

COLORADO

Moffats (Craig)	1,300	1,250
Fort Collins	3,050	2,750
Florence	1,100	1,100
Others	2,050	2,050
Totals	7,500	7,150

NEW MEXICO

Table Mesa	350	....
Artesia	1,250	1,250
Hogback	550	550
Rattlesnake	....	500
Others	250	200
Totals	2,400	2,500
Totals Mountain States	74,700	74,300

EASTERN STATES

(Including Ill., Ind., Ohio, W. (Va., Pa., Ky. and N. Y.)	104,500	106,000

PRODUCTION SUMMARY

East of Rockies	1,671,300	1,670,500
United States	2,363,300	2,358,500

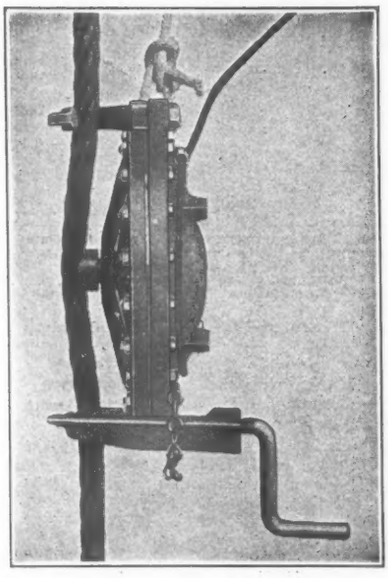
Martin-Loomis
Automatic
Recording Weight Indicator

No Moving Parts

No Wear

Extreme Simplicity

Maximum Accuracy



Bronze Case Containing Rubber Diaphragm Attached to Dead Line

All Bronze

Easily Installed

Fool Proof

Internationally Used

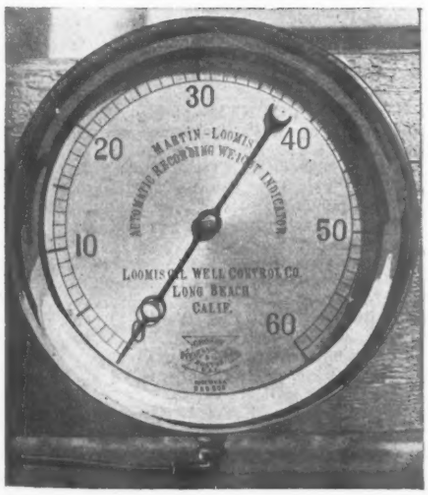
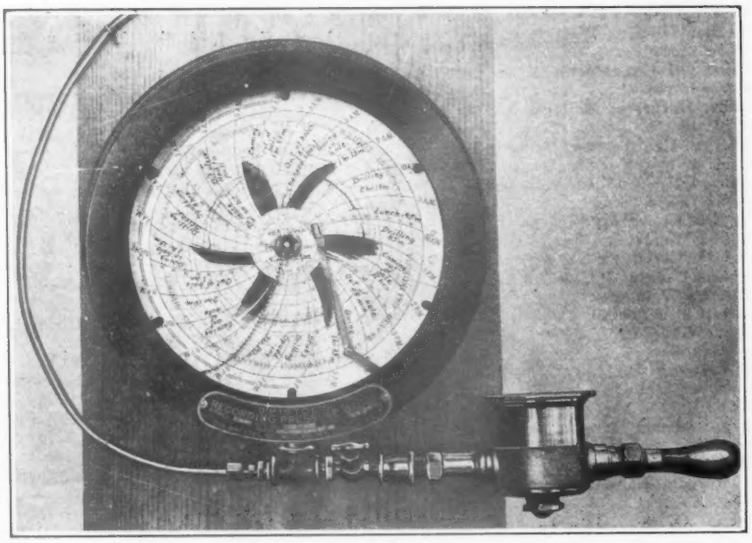


Fig. 3—Gauge used in conjunction with weight indicator placed in easy view of the driller



Showing details of 24-hour day drilling record as recorded through weight indicator

MARTIN-LOOMIS CORPORATION

568 East Willow Street **Long Beach, Calif., U. S. A.**

Export Representatives
OIL WELL SUPPLY COMPANY

Mid-Continent Representatives
REED ROLLER BIT CO., HOUSTON, TEXAS

Say you saw it in The OIL WEEKLY

COMPLETIONS FOR PAST WEEK IN U.S. FIELDS

SUMMARIZED REVIEW OF FIELD RESULTS

State—	Completions This Week	Completions Last Week	Producers This Week	Producers Last Week	Gas Wells This Week	Gas Wells Last Week	Failures This Week	Failures Last Week	Initial Production This Week	Initial Production Last Week
Arkansas	3	3	2	1	..	..	1	2	70	75
California	14	9	10	6	..	..	4	3	15,650	8,150
Colorado	2	..	2	2	..	..	..	..	175	....
Illinois	2	2	1	..	..	..	1	..	45	35
Indiana	10	3	3	..	5	..	2	3	60	....
Kansas	23	14	10	8	1	2	12	4	1,678	2,402
Kentucky	22	21	19	16	1	..	2	5	1,008	493
Louisiana	18	11	5	3	7	1	6	7	4,680	60
Montana	1	1	1	1	..	..	..	..	75	50
New Mexico	..	1	..	1	..	..	..	..	....	100
New York	9	15	8	13	..	2	1	..	18	44
Ohio	31	15	11	9	16	6	4	..	608	588
Oklahoma	64	49	32	20	7	7	25	22	12,953	13,717
Pennsylvania	43	53	37	42	3	6	3	5	116	260
Tennessee	8	13	3	4	1	2	4	7	60	125
Texas	109	119	50	76	6	5	53	38	69,163	81,176
West Virginia	11	21	3	2	2	16	6	3	14	43
Wyoming	2	2	2	1	..	..	..	1	115	61
Totals	372	352	199	205	49	47	124	100	106,488	107,379
Increase this week	20	..	..	..	2	..	24	..	....	....
Decrease this week	..	..	6	..	..	..	..	..	891	....

NOTE—Following is the explanation of abbreviations, signs, etc., used in completion and wildcat reports: *—dry hole, abandoned well; ‡—salt water; †—junked and abandoned; ¶—million cubic feet of gas; abn—abandoned; bbls—barrels; b. s.—basic sediment; cas—casing; co—cleaning out; dk—derrick; dr—drilling; fsh—fishing; ft—feet; in—inches; loc—location; m—milling; n, s, e, w—north, south, east, west; r—reaming; sd—shut down; sdtr—sidetracking; sp—spudding; sr—straight reaming; std—standardizing; sw—salt water; td—total depth; ur—underreaming; wo—workover; woar—waiting on standard rig.

OKLAHOMA

Company, Well and Location	Initial Production Bbls.	Depth
BECKHAM COUNTY—		
Prince Bros. & Atlantic Oil Prod. Co., Taylor 1, c sw nw, 5-8n-23w	*	3003
CADDO COUNTY—		
English Drlg. Co., Cutshell 3, nwc se, 5-5n-9w	70	2420
CARTER COUNTY—		
Schermerhorn et al, Crockett 1, ne nw sw, 23-1s-3w	265	2310
COMANCHE COUNTY—		
Danciger Oil Co., Spitler 1, nec se, 10-2n-10w	*	2203
COTTON COUNTY—		
Jenkins et al's Smith 2, sw se se, 34-1s-10w	25	2184
CREEK COUNTY—		
Bu Vi Bar Oil Co., West 1, sec sw, 3-15-8e	*	3869
Paraffine Oil Co., Martin 2, swc se nw, 26-16-11e	*	2825
Kennedy, Horner et al, Tiger 2, c ne nw, 25-18-11e	*	2454
Olean Pet. Co., Bigpond 4, nwc sw ne ne, 36-15-7e	¶15	3244
Summitt Drlg. Co., Gilles 1, ne se nw, 14-16-11e	60	2389
Skelly Oil Co. et al, Dickson 1, sec ne, 24-17-9e	300	2155
GRADY COUNTY—		
Okla. Gas Utilities Co., Wood 2, nwc ne ne nw, 2-4n-8w	¶60	2400
Farwell 4, ne sw se, 23-5n-8w	¶25	2400
Meridian Gas Co., Farwell 4A, nec se, 23-5n-8w	¶5	2040
Wirt Franklin Oil Corp., Burke 1, se ne se, 17-3n-5w	*	2776
JEFFERSON COUNTY—		
Beck & Lapham, sery 1, sw se sw, 34-6s-5w	20	1337
KAY COUNTY—		
Fred Morgan, Elder 1, nwc sw, 29-28-1e	¶1	1160
Industrial O. & G. Co., Letsig 1, c se ne, 28-27-1w	*	832
Harris & Haun, Miller 1, c sw se, 20-29-1e	*	615
LOGAN COUNTY—		
Marland O. Co. Gragg 1, swc ne, 16-18-4w	413	4001
Roxana, Williams 1, nwc, 32-19-4w	335	6178
Ross 1, nwc, 29-19-4w	715	6060
MUSKOGEE COUNTY—		
Hale-Ford Oil Co., Clark 2, sec sw nw se, 6-14-19e	225	522
Bryan & Emery, Lowery 1, nwc sw nw sw, 9-15-15e	*	1665
OKMULGEE COUNTY—		
B. Shepherd, Burgess 1, nwc ne nw, 20-12-13e	10	2115
J. E. Wallace, Colbert 6, cwl nw se, 14-14-14e	10	1681
T. H. McBrayer et al, Tucker 2, swc nw, 9-15-14e	¶8	1833
Panoose Oil Co., Francis 2, swc se, 25-16-13e	*	2369
J. L. Powell, Deer 1, ne se ne, 20-14-15e	*	1453
OSAGE COUNTY—		
Devonian Oil Co., 4, nec nw ne ne, 33-21-10e	30	1526
Tidal Oil Co., 3, sec sw se se, 28-21-10e	25	1535
Peters Pet. Co., 3, ne nw sw, 26-25-9e	760	2150
2, nwc sw, 26-25-9e	200	2165
Lewis Gas Prod. Co., 2, sw nw sw, 2-26-6e	900	2913
1, nwc sw, 2-26-6e	860	2880
Kewanee O. & G. Co., 6, ne sw se, 34-27-6e	230	2867
5, ne sw ne, 28-27-6e	740	2959
2, sw se ne, 28-27-6e	500	2972
PITTSBURG COUNTY—		
J. L. Pattison, McDuff 1, swc nw se, 32-9n-16e	¶3	4525
PONTOTOC COUNTY—		
Homa Okla Oil Co., Berry 1, se ne se, 19-5n-8e	655	2571
La. Oil Ref. Co., Harjo 7, nw sw sw, 17-5n-8e	250	2704
Conservative O. & G. Co., Brown 1, nwc ne, 28-5n-6e	*	3520
POTTAWATOMIE COUNTY—		
Magnolia Pet. Co., Talley 2, se sw nw, 19-7,4e	140	3912
Indep. O. & G. Co., Darby Pet. Co. & Gypsy O. Co., Hamby 2, nwc, 14-7-4e	100	3800
I. T. I. O. Co., Sullivan 1, sw nw se, 25-7-3e	3030	4213
ROGERS COUNTY—		
Harry Skelly et al, Bumm 1, csl se se, 3-21-17e	*	585
F. C. Ingram, Setzer 1, nec sw, 26-21-17e	*	538
Cro Oil Co., Setzer 1, sec sw nw, 25-21-17e	*	510
Harry Skelly et al, Spears 1, nec, 19-22-17e	*	733
SEMINOLE COUNTY—		
I. T. I. O. Co., Nitey 3, nw ne ne, 2-7-6e	300	4495
Carter Oil Co., Walker 3A, s esw se, 15-8-6e	95	4381
Twin State O. Co., Jones 3, se ne se, 11-8-6	125	4210
Magnolia Pet. Co., Seay 10, nwc sw, 12-9-5	485	4268
Mid-Continent Pet. Corp., Saloche 4, se sw sw, 33-10-6e	900	4468
McCullough O. Co., Powell 1, nwc, 11-6n-5e	*	....
Sinclair O. & G. Co. & Darby Pet. Co., Johnson 1, nwc sw, 5-7-7e	*	4532
Empire G. & F. Co., Lacey 8, nw sw sw, 14-8-6e	*	4260
I. T. I. O. Co., Davis 6, nw se sw, 13-8-6	*	4385
Amerada Pet. Co., Shaffer-Young 3, swc se sw, 29-1n-8w	*	2510
STEPHENS COUNTY—		
Medlin et al, Burke 1, nwc ne, 34-1s-8w	180	1689
Magnolia Pet. Co., Shaffer-Young 3, swc se sw, 29-1n-8w	*	2510
TULSA COUNTY—		
A. J. Spears, Glenn 7, sec ne nw, 11-17-12e	*	2117
WAGGONER COUNTY—		
C. R. Cane, Williams 1, csl ne se, 35-17-17e	¶8	892
Commercial Dev. Co., Elder 4, swc nw nw, 6-16-15e	*	1568
Elk Drlg. Co., Norfer 1, nec, 23-18-15e	*	1040

KANSAS

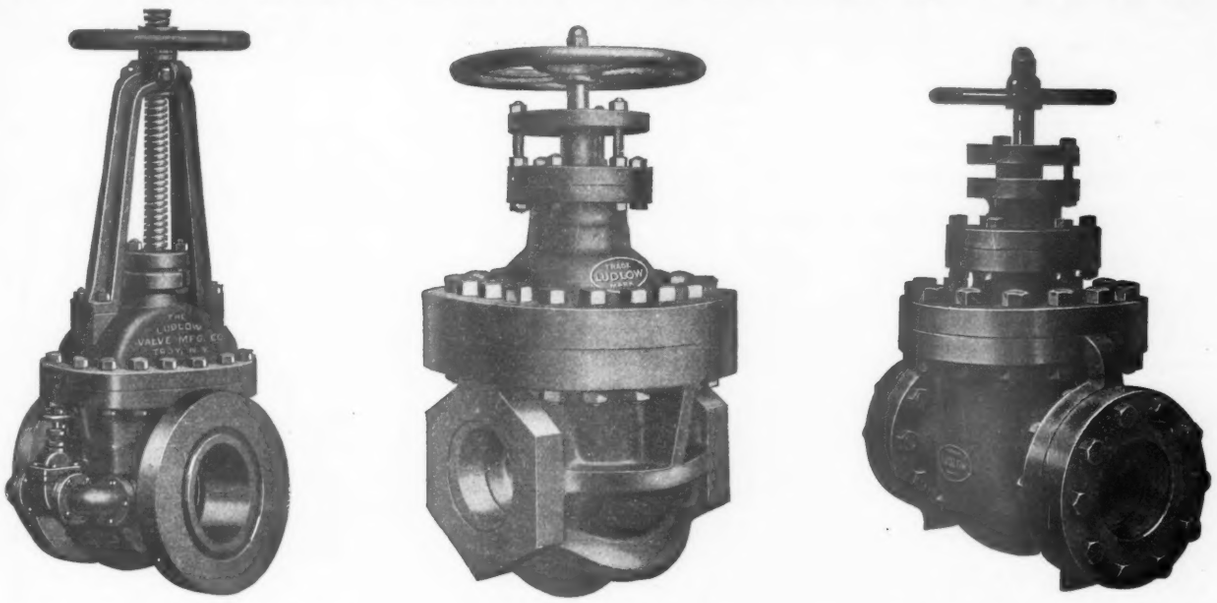
Company, Well and Location	Initial Production Bbls.	Depth
BUTLER COUNTY—		
Paul et al, Goff 1, nwc ne se, 9-22-15e	*	3175
COFFEY COUNTY—		
Garland et al, Goff 1, nwc ne se, 9-22-15e	*	1650
COWLEY COUNTY—		
Roth & Faurot, Winfield townlot 1, lot 1, blk 11, 22-32-4e	¶3	2917
Trees Oil Co., Dickinson 2, sec sw ne, 30-30-4e	*	2903
Roth & Faurot, Richardson 1, c sw sw, 12-33-5e	*	717
Pryor & Lockhart, Gearhart 1, nec nw se, 31-34-7e	*	3464
ELK COUNTY—		
Elk Pet. Co., Denton 1, nec se, 4-30-9e	200	2328
Hood et al, Hyman 2, cnl se se, 9-31-10e	10	2014
Union Gas Corp., Vick 1, c ne sw, 2-31-10e	*	2025
Theta Oil Co., Marshall 3, swc se se, 27-31-10e	*	2296
GEARY COUNTY—		
Brinkley et al, Fawley 1, nec nw ne, 16-10-5e	*	2501
GREENWOOD COUNTY—		
Darby Pet. Co., Schwab 5, nec sw nw, 30-22-13e	360	1742
Christy et al, Christy 1, swc nw, 31-24-13e	10	1688
Rogers et al, Brown 1, nec 3-26-10e	30	1965
Mohawk Oil Co., Cross 1, sec nw ne, 7-27-11e	20	1912
Prairie O. & G. Co., Webber 1, se ne se, 9-25-13e	*	1600
Transcontinental Oil Co., Pixlee 2, sec ne ne, 10-22-10e	*	2197
ROOKS COUNTY—		
Derby Oil Co., Kruse 1, nec nw ne, 3-10-16w	35	3141
SALINE COUNTY—		
Mentor O. & G. Co., Muir 1, swc, 17-15-2w	*	3501
SUMNER COUNTY—		
Roxana Pet. Corp., Taton 4, swc ne nw, 36-31-2e	675	1901
Mead et al, Emerich 1, tr 3, 14-32-2e	288	2090
Palmer & Barnsdall Oil Corp., Wenrich "A" 1, nec nw, 23-32-2e	50	1305
WABUNSEE COUNTY—		
Empire O. & R. Co., Schwalm 1, sec, 19-12-11e	*	3438

MOUNTAIN STATES

WYOMING

Company, Well and Location	Initial Production Bbls.	Depth
SALT CREEK—		
Midwest Ref. Co., Wyoming Associated 31, se, 23-40-79	*	1928
Midwest Oil Co. 4L, nw, 25-40-79	115	2197

"WORTH THEIR WEIGHT IN GOLD"



FIELD OPERATION
HAS FULLY PROVEN THE
SUPERIORITY
OF
"LUDLOW VALVES"

"Worth Their Weight in Gold"

THE LUDLOW VALVE MFG. CO.
TROY, NEW YORK

BOSTON PITTSBURGH CHICAGO KANSAS CITY

TRADE LUDLOW MARK

LUDLOW VALVES

DISTRIBUTED BY

Mid-Continent Supply Company, Fort Worth, Texas
Henderson Iron Works, Shreveport, La.
Harrisburg Pipe & Pipe Bending Co., of Texas, Inc., Houston, Texas
Peden Iron & Steel Company, Shreveport, La.

Say you saw it in The OIL WEEKLY

COLORADO

Company, Well and Location	Initial Production Bbls.	Depth
FLORENCE—		
Mojada O. & G. Co., Hassel 4, 21-20-69	100	1800
Travis Oil Co., Travis 16	75	....

MONTANA

Hardrock Oil Co., Craig 1, nw, 13-34-2w	75	1365

EASTERN STATES

PENNSYLVANIA

BRADFORD COUNTY—		
South Penn Oil Co., Bingham 576, tr 1	2	....
Erie R. R. Rightaway, 39		....
Erie R. R. Rightaway, 40	2	....
Dent, 117	2	....
Lot 6, tr 53	2	....
Chipmunk, 79	2	....
Melvin 213	4	....
N. V. V. Franchot, Rounds 15	8	....
Storms & Coast, Hanes 1	3	....
J. H. Hannan, Strong & Co. 1	2	....
T. H. Kennedy, Bingham 490, tr 156	2	....
Bingham 490, tr 157	3	....
Hazlewood Oil Co., Block 22, tr 45	2	....
Simon Bros., Corwin 7	7	....
G. L. Rhodes & Co., Emerson 1	4	....
North Branch Oil Co., North Branch 21	4	....
J. E. Karl & Co., Hamlin 7	3	....
Moses Sullivan, Sullivan 1	2	....
Hamlin & Bovaird, Rew 22	3	....
J. G. McCandless, McCandless 8	5	....
A. J. Crisman, Franchot 2	3	....
W. L. Wasson & Co., Borden 13	3	....
U. G. Smith, Smith 19	3	....
Kahle Oil Co., Norton 11	4	....
Grow Farm Oil Co., Grow 1	3	....
A. Schorman, Sanderson 1	2	....
Penn. Oil Products & Refg. Co., Fee 20	3	.....
BUTLER COUNTY—		
Birckbichler Bros., Badauf 1	3	....
George Levier & Co., Say 1	¶1¼	....
VENANGO COUNTY—		
P. A. Wilbert & Co., Wilbert 24	2	....
W. I. Stephens, Dawson 36	2	....
S. & C. Lake Ice Co., Fee 8	2	....
Dempseytown Gas Co., Kevelin 2	¶1	....
CENTER-MIDDLE FIELD—		
E. Z. Zeller, Foster 17	2	....
J. L. Billstone, McDonald 1	2	....
McCool Bros., Smith 1	2	....
CLARION COUNTY—		
Lucart & Co., Gilmore 1	*	....
Brim O. & G. Co., Grazier 2	¶1	....
ALLEGHENY COUNTY—		
John C. Nock, B. Wolfe 4	1	....
Robinson & Co., H. Myers 1	*	....
Scott & Co., Fry 1	10	....
BEAVER COUNTY—		
P. R. McLaughlin & Co., Dawson hrs 1	*	....
WASHINGTON COUNTY—		
New O. & G. Co., Montgomery 1	5	....

NEW YORK

ALLEGANY COUNTY—		
Pally Bros., Brown 1	*	....
Hazelwood Oil Co., Allegany 71	2	....
A-C-A Oil Corp., Fee 1	2	....
F. W. Stephan & Co., Kurthaltz 1	2	....
J. C. Minderler, Minderler 1	2	....
Fairview Oil Co., Fairview 1	2	....
Barnes & Scott, Scott & Co. 1	3	....
W. J. Richardson & Co., First Trust Co. 1	2	....
Forest Oil Corp., July 18	2	....

WEST VIRGINIA

RITCHIE COUNTY—		
Beall & Bickerstaff, W. N. Cox 1	*	....
Aetna O. & G. Co., Lee Pratt 1	¶1	....
J. G. Cochran, Cochran 1	¶1	....
CALHOUN COUNTY—		
Sycamore Fuel Co., Triplett 1	10	....
W. H. Bickel, Wolverton 1	*	....
GILMER COUNTY—		
Hope Construction & Refg. Co., Wilt 1	1	....
PLEASANTS COUNTY—		
Sharp Farm Oil Co., Sharp 2	3	....
Pickens & Co., Bennett 6	*	....
E. C. Hartman, Hammetts hrs 6	*	....
TYLER COUNTY—		
South Penn Oil Co., White 1	*	....
JACKSON COUNTY—		
Edward Harshman & Co., Hutchinson 1		1....

KENTUCKY

OHIO COUNTY—		
J. C. Ellis & Co., Daniels 3	100	....
Hoagland 1	150	....
Hoagland 2	150	....
Bartlett 4	*	....
Joseph O'Hair, Howard 1	10	395
S. H. Russell & Co., Kelly 5	20	408
Rex-Pyramid Oil Co., Frank Lake 3	50	....
R. P. Rowe & Co., Sands 1	¶3	....
BARREN COUNTY—		
Wood Oil Co., Pace 4	200	525
Howen 3	15	517
Norris Bros. & Co., Jones 5	100	....
Esslinger Oil Co., Morton 1	5	520
Morton 2	5	510
Morton 3	50	503
Morton 1	2	520
Hunt & Co., Browning 5	25	....
Smith & Snyder, Baker 1	5	574
LEE-OWSLEY COUNTIES—		
Williamson-Caywood Oil Co., Fraley 6	50	....
ALLEN COUNTY—		
S. W. Lehman & Co., Woods 8	64	265
WAYNE COUNTY—		
J. C. Blair Oil Co., Gregory 1	2	....
Gregory 2	5	....
WARREN COUNTY—		
The Ohio Oil Co., Richards 1	*	1852

SOUTHEASTERN OHIO

MORGAN COUNTY—		
East Ohio Gas Co., Engle & Co. 1	¶¼	....
Morgan O. & G. Co., Woodyard 2	¶½	....
Charles Hollowell, Grub 1	¶¼	....
WASHINGTON COUNTY—		
Isaac W. Atkinson, Atkinson 3	2	....
Burton & Co., VanWay 2	*	....

CENTRAL OHIO

GUERNSEY COUNTY—		
Preston Oil Co., McCourt 8	135	3635
Fulton 2	5	....
Wigginton 2	90	....
Pure Oil Co., Ridgley 3	30	....
Cambridge Oil Co., Kerr 1	10	....
CUYAHOGA COUNTY—		
Goff Bros., Dreyer 1	¶1¼	....
Hulse & Kundtz, Ames 2	¶1	....
John Arthur, Fuller 1	*	....
Gould 1	*	....
LICKING COUNTY—		
Hope Construction & Refg. Co., Morgan 1	100	....
Pure Oil Co., Hoover Bros. 2	123	....
Sterl C. Brown, Baughman 7	20	....
PERRY COUNTY—		
Fairview O. & G. Co., Gregg 1	75	3725
William Cline & Co., Timmons Coal Co. 3	¶1½	....
Hope Construction & Refg. Co., Daniel Harnes 1	18	....
ATHENS COUNTY—		
Wehrle Interests, William 1	¶¼	....
Bowman O. & G. Co., Brown 1	¶¼	....
ASHLAND COUNTY—		
Ohio Fuel Gas Co., Kettering 1	¶1½	....
Hulse & Kundtz, Hartsmiller 2	¶1	....
LORAIN COUNTY—		
Empire G. & F. Co., Brooks 2	¶½	....
WAYNE COUNTY—		
Logan Gas Co., Troxel 1	*	....
MEDINA COUNTY—		
Johnson & McGrath, Brinker 1	*	....

NORTHWESTERN OHIO

HARDIN COUNTY—		
Talbot & Seackett, Wilmoth 1	¶¼	1280
Stephens 1	¶¼	1282
Hays 1	¶¼	1322
Kurtz Interests McNutt 1	¶2½	1270
Dickelman 2	¶½	1296

INDIANA

HARRISON COUNTY—		
Louisville Gas & Electric Co., Suggins 2	*	1700
Estill 1	¶½	....
Bryant 2	¶½	....
VIGO COUNTY—		
Siosi Oil Corp., Riggs 8	30	2191
GIBSON COUNTY—		
William Bell & Co., Catt-Hatfield 1	25	1570
JAY COUNTY—		
Nick E. Masters, Kemp 1	5	....
SULLIVAN COUNTY—		
Dome Oil Co., Unger 1	¶½	....
SHELBY COUNTY—		
Morristown Gas Co., Linville 1	¶½	....
RUSH COUNTY—		
T. E. McCoy, McCoy 1	¶1	867
MARTIN COUNTY—		
B. J. Dunning, Hert 1	*	735

TENNESSEE

CLAY COUNTY—		
E. A. Brandenbarger & Co., Greenwood 2	40	450
McDonnell & Kraft, Thompson 1	15	509
Shirk & Bovard, Davies 1	5	600
Wittmer O. & G. Co., Sidwell 1	*	....
J. L. Miller, Keisling 4	*	550
JACKSON COUNTY—		
Pittsburgh O. & G. Co., Draper 1	*	....
W. S. Hughes, Near Gainsboro 1	*	....
OVERTON COUNTY—		
Alexander & Co., Near Sprg. Creek 1	¶2	....

ILLINOIS

WABASH COUNTY—		
Breen Oil Co., Stillwell 3	45	1401
McDONOUGH COUNTY—		
Phillip Elting, Stoneking 1	*	590

CALIFORNIA

BREA-OLINDA—		
Shell Co., Orange 16	4600	4623
HUNTINGTON BEACH—		
World Pet. Corp., M. & B. 8	300	4340
KERN FRONT—		
George F. Getty, McDougal 3, 26-28-27	350	2020
LONG BEACH—		
McKeon Drilling Co., Evans 2	2200	5962
Macrate 1	1400	6179
B. & H. Oil Co., No. 2	400	5932
MIDWAY—		
Standard Oil Co., No. 52, 29-31-24	400	4580
SEAL BEACH—		
Marland Oil Co., Bixby 18, wo	1350	4920
VENTURA—		
Associated Oil Co., Lloyd 35	2850	5600
Shell Co., Edison 19	1800	7095

SOUTH LOUISIANA

VINTON—		
Gulf, Star-Vincent 44	90	2460

TEXAS

TEXAS GULF COAST

SPINDLE TOP—		
Gulf, Marrs McLean A-10	*	5375
Marrs McLean A-18	1800	5100
Sun, Coit 1	2000	5000
Magnolia, Fee 7	*	5030
HULL—		
Republic Prod. Co., Dolbear 94	500	2710
Gulf, Phoenix Dev. Co. 83	100	3640
Phoenix Dev. Co. 88	250	2250
BIG CREEK—		
Gulf, T. W. Davis 36	300	3550
HIGH ISLAND—		
Gulf, Geo. E. Smith 6	550	2925
ORANGE—		
Brownie-Babbett Oil Co., McLean 4	*	3540
Great Southern Oil Co., Bland 1	*	3140
Gulf, Lee Hager Fee 21	*	4200
PIERCE JUNCTION—		
Gulf, E. R. Taylor et al 23	1000	4700
Navarro Oil Co., Cain 4	800	5075
SOUR LAKE—		
Ebberts, Falloure & Hebert, Jackson 3	*	2900

ARKANSAS

NEVADA COUNTY—		
J. J. O'Brien, Haynie A-5, 6-14-20	50	1204
UNION COUNTY—		
W. R. Keever, Ezell 5, 12-17-15	20	2170

LOUISIANA

BIENVILLE PARISH—		
Lake Bistineau Gas Co., State 1, 16-16-10	¶1½	2531
CADDO PARISH—		
Standard Oil Co., Hart 17, 34-21-16	75	1843
MOREHOUSE PARISH—		
Consolidated Pet. Co., Perry 1, 14-20-4e	22	2165
RICHLAND PARISH—		
Louisiana Pet. Corp., Binion-Sortor 1, 22-17-6e	5	2474
Moody & Seagraves, Hatch 1, 34-16-5e	¶2½	2483
Nat. G. & F. Corp., Sartor-Phillips 1, 9-16-6e	¶54½	2466
WEBSTER PARISH—		
Ark. Nat. G. Co., North Central Texas 1, 36-23-10	¶1½	2720
Humble, Gray 1, 26-21-10	¶4½	4572

(Continued on page 82)

CONFIDENCE

A new kind of "confidence game"

THE NEW KIND of confidence game is played by American industry. The rules are simple. You select those companies in whom you have complete confidence and you buy their products.

That's why Haynes Stellite is proud of 1926.

It was a year of progress and of achievement. Stellited bits drilled oil wells, with enviable records of economy and speed. Stellited parts cut down maintenance costs in cement mills. Stellited tools extended the usefulness of Haynes Stellite in machine shops and automotive factories.

Booklets describing the use of Haynes Stellite and the Stelliting process will show you where you can use them in your business. They will gladly be sent on request.

HAYNES STELLITE COMPANY
Unit of Union Carbide and Carbon Corporation
KOKOMO, INDIANA

District Sales Offices: Carbide and Carbon Building, 30 East 42d Street, New York; Peoples Gas Building, Chicago; Keith Building, Cleveland; General Motors Building, Detroit; 114 Sansome Street, San Francisco; 1310 Santee Street, Los Angeles.

Excerpt from first advertisement in 1927

MORE people played the new kind of confidence game with us in 1927 than ever before. We are naturally proud of this record.

Yet, after all, there is nothing mysterious about it. Our trump cards were Quality, Uniformity, Service and Fair Dealing. There are no aces up the sleeve in the kind of confidence game we are talking about. All cards are on the table and everybody wins.

We enjoyed playing the game with our customers last year. We intend playing the same game this year in the same way.

Plan to join us in 1928. Our present customers will tell you how successfully the new kind of confidence game is played.

HAYNES STELLITE COMPANY
Unit of Union Carbide and Carbon Corporation

UCC

DISTRICT SALES OFFICES

Chicago—*1949 Peoples Gas Bldg.* Los Angeles—*1310 Santee Street*
Cleveland—*628 Keith Building* New York—*30 East 42d Street*
Detroit—*4-240 Gen'l Motors Bldg* San Francisco—*114 Sansome St.*
Houston—*6119 Harrisburg Blvd.* Tulsa—*Exchange Nat. Bank Bldg.*
General Offices—Kokomo, Indiana

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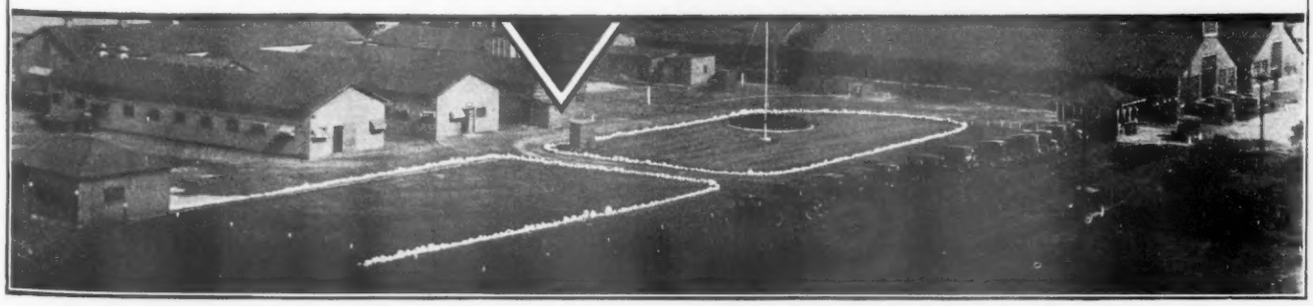
HAYNES STELLITE



WILDCATS FROM ALL SECTIONS

SOUTHERN CALIFORNIA

Completions

Company, Well and Location		Initial Production Bbls.	Depth
HUNTINGTON BEACH—			
Leo Stein, No. 1	*		5155
INGLEWOOD—			
Alenson & Co., No. 1	*		3500
SAN BERNARDINO COUNTY—			
H. & P. Oil Co., No. 1	*		2140

CLAREMONT—Claremont O. & Gas Co.'s 1, sd 1130 ft.

COSTA MESA—Mesa Pet. Corp.'s BG 1, dr shell 1900 ft.

CYPRESS—Ohio Oil Co.'s 1, 9-14-11, rig.

DAVIDSON CITY—Calif. Well Drilling Co.'s DAE 1, sd 7060 ft.

DOMINGUEZ — Dominguez Extension Oil Co.'s 1, testing, td 5510 ft.

EL SEGUNDO—Rider Synd.'s 1, sd 2300 ft. Southern California Drilling Co.'s Matteson 1, sd 4865 ft.

GARDENA—Circle O. & G. Co.'s Pomeroy 1, probably will abn 4130 ft.

FULLERTON—Shell's Stern 1, dr hard sand 3900 ft.

HAWTHORNE—James O'Donnell's No. 1, will be taken over and deepened by Shell Co. San Clemente's Pack 1, sd 5765 ft. Scott & Currier's 1, rig.

HUNTINGTON BEACH — Calnan Pet. Corp.'s S. & W. 1, co 3100 ft, td 5107 ft. Duell Pet. Corp.'s Schuh 1, rig. Leo Stein's No. 1, abn 5155 ft.

INGLEWOOD—Alenson & Co.'s 1, abn 3500 ft. Hurst Oil Corp.'s Simons 1, sd 3740 ft.

LANCASTER—Otis Andrews' 1, dr 1020 ft. J. B. Harding's 1, sd 975 ft.

LYNWOOD—Security Pet. Corp.'s 1, dr hard sand 3526 ft.

MAYWOOD—Magnolia Pet. Synd.'s 1, sd 4450 ft.

MONTEREY PARK—Monterey Park Pet. Corp.'s 1, sd 3940 ft.

MONTEBELLO—Rotary Ail Drill Co.'s Germain 1, sd 1400 ft.

NEWHALL—W. W. Stabler's Castaic 1, sd 3410 ft.

ORANGE—Chas. A. Son's Pinkerton 1, sd 3620 ft.

POTRERO—Associated's Cypress 1, fsh for tubing 5408 ft. Carpenter & Smith's 1, sd 5400 ft. Pan-American Petroleum's Connolly 1, dr hard sand 3714 ft.

PUENTE HILLS—Anchor Pet. Co.'s Hudson 1, sd 2270 ft.

RIVERA—Associated's Patterson 1, dr gray sand 5114 ft.

SAN FERNANDO—Shell's Mission 1, fsh 4955 ft.

SAN JOSE HILLS—Bardeen Oil Co.'s 3, sd 2255 ft. D. & B. Oil Co.'s Amar 1, plugged to 2600 ft, sd. Fuller & Gray's Sanchez 1, rig.

SEAL BEACH—George F. Getty's Townsite 1, sd 681 ft.

SUNSET BEACH—Olympic Ref. Co.'s Community 1, dr shale 3784 ft.

SAN JUAN CAPISTRANO—O. K. Carr's Forster 2, sd 4185 ft.

TELEGRAPH CANYON—Quadra Pet. Co.'s M. J. M. 1, sd 4210 ft.

YORBA—Standard's Yorba 1, dr gray sand 5203 ft.

WATTS—Southwest Pet. Corp.'s Ramsaur 1, sd 4300 ft.

WATSON — White-Behr Consolidated Oil Co.'s 1, 4616 ft.

MISCELLANEOUS

RIVERSIDE COUNTY—L. R. Clark's Cabazon 1, installing rotary 900 ft. Hemet Pet. Corp.'s 1, dr limestone 2121 ft. Spindletop Pet. Synd.'s 1, sd 3175 ft. Trabuco Oil Co.'s 1, dr hard sand 3330 ft.

SAN BERNARDINO COUNTY — Colton Terrace Oil Co.'s 1, co 1610 ft, td 1675 ft. H. & P. Oil Co.'s 1, will abn 2140 ft. Hesperia O. & G. Co.'s 1A, plugging back from 3310 ft. J. W. McPhearson's Clide 1, dr hard sand 383 ft. Western Pacific Oil Co.'s 3, sd 3305 ft.

SAN DIEGO COUNTY—Davenport O. & G. Co.'s 1, dr hard sand 315 ft. Ganymede and Dunn's 1, fsh for dr pipe 3210 ft. Mills Oil Co.'s Pueblo 1, dr hard sand 1963 ft. S. S. Turner's Baler 1, dr hard sand 290 ft.

NOTE—Following is the explanation of abbreviations, signs, etc., used in completion and wildcat reports: *—dry hole, abandoned well; ‡—salt water; †—junked and abandoned; ¶—million feet of gas; abn—abandoned; bbls—barrels; b.s.—basic sediment; cas-casing; co—cleaning out; dk—derrick; dr—drilling; fsh—fishing; ft—feet; in—inches; lcn—location; m—milling; n, s, e, w—north, south, east, west; r—reaming; sd—shut down; sdtr—sidetracking; sp—spudding; sr straight reaming; std—standardizing; sw—salt water; td—total depth; ur—underreaming; wo—workover; wosr—waiting on standard rig.

NORTHERN CALIFORNIA

Completion

Company, Well and Location		Initial Production Bbls.	Depth
SATICOY—			
Standard Oil Co., No. 3, 15-3-22	*		1280

KERN COUNTY

ADOBE CANYON—Berry Oil Co.'s 1, 25-27-28, new lcn.

BAKERSFIELD—Pacific Eastern Prod. Co.'s KCL 1, 6-30-28, dr 5584 ft; KCL 2, 6-30-28, dr hard sand 3112 ft.

BELRIDGE—Zurich Oil Co.'s 1, 18-28-22, dr blue shale 2540 ft.

BUTTONWILLOW — Milham Explo. Co.'s K1A, 8-28-23, plugged to 3250 ft, gas well; No. 2, 8-28-23, gas well, shut in 2740 ft; No. 3, 8-28-23, dr 1662 ft; Salisbury 1, will deepen from 2150 ft. McAdams et al's 1, 26-29-23, sd 4684 ft. Southern Calif. Gas Co.'s 1, 4-28-23, dr 2250 ft.

COMANCHE POINT—Kern 29 Oil Co.'s 1, 29-31-30, sd 2440 ft. W. W. Stabler's 1, 23-32-29, rigging up.

DELANO—North American Consolidated Oil 32-26-28, rigging up.

CORRAL CANYON—Poso Prod. Co.'s 2, Co.'s 1, 5-25-25, dr shale 3850 ft.

DEVILS DEN—Marathon Oil Co.'s 1, 13-25-28, sd 4390 ft. Midway Northern Oil Co.'s 1, 25-25-18, sd 2460 ft. Robins Oil Co.'s 1, 25-25-18, sd 2280 ft. R. H. Sayers' 1, 25-25-18, sd 1475 ft.

EDISON—General Pet. Corp.'s Kerwin 1, 5-30-29, will make production test at 3965 ft. Midway Northern Oil Co.'s 1, 29-29-30, dr 2803 ft. Superior Oil Co.'s 1, 24-29-29, dr 900 ft.

FRUITVALE—Pacific Eastern Prod. Co.'s 1, 21-29-27, pumping 300 barrels.

GREENFIELD—J. E. O'Donnell's 1, 31-30-28, lcn.

GOULD HILLS—Bomke & Ball's Larson 1, 12-29-20, dr 1457 ft. California-Kentucky Oil Co.'s 1, 8-29-21, sd 1620 ft. Exeter Oil Co.'s Parry 1, dr 630 ft. Herbert Moore's 1, 11-29-20, sd 510 ft; 2, 11-29-20, rigging up. Myrtle E Oil Co.'s 1, 8-29-21, sdtr liner 900 ft. H. B. Porter's 1, 36-28-20, setting 8¼-in cas 1425 ft, td 1510 ft. Rhoads Oil Co.'s 1, 20-29-21, sd 1845 ft; 2, rig.

McKITTRICK HILLS — McKittrick Hills Oil Co.'s 2, 18-30-22, pumping 20 barrels.

MON BLUFF—Shell's Glide 1, 3-28-28, dr hard sand 4125 ft. Signal Gasoline Synd.'s 1, 27-27-28, lcn.

MT. POSO—Modoc Oil Co.'s 1, 32-26-28, lcn. General Petroleum's Glide 7, 21-27-28, lcn; Glide 9, 21-27-28, dr 150 ft.

SEMITROPIC—Semitropic Oil Co.'s 1, 21-26-22, dr sandy shale 1575 ft.

SUNSET—Fresno-Sunmaid Oil Co.'s 1, 16-11-24, sd 4200 ft. Salegna Investment Co.'s 1, 9-11-24, dr 501 ft. Signal Gasoline Synd.'s 1, 8-11-24, sd 600 ft.

TEMBLOR HILLS—Jackson & Chamberlain's 1, 36-29-20, sr 375 ft, td 475 ft. Salegna Investment Co.'s 1, 36-29-20, sd 600 ft.

TEHACHAPI-MOJAVE—C. R. Asmussen's 1, 21-11-11, sd 1510 ft. Crusaders Oil Co.'s 1, 21-10-10, oil showings 2370 ft. J. B. Harding's 1, 5-10-10, sd 1050 ft.

WASCO—Main Oil Co.'s 2, 28-27-24, co 5270 ft.

SANTA BARBARA COUNTY

GOLETA—Barnsdall Oil Co.'s Edwards 2, 8⅝-in cas smt 2440 ft, td 2455 ft. California-American Oil Co.'s BP 1, sd 1500 ft. J. J. Rekar's Pa Patera 1, 8-4-29, dr hard sand 2195 ft.

SANTA BARBARA — Channell O. & Dev. Co.'s 1, 22-4-26, failed on prod test 6025 ft. Twin States Oil Co.'s 1, 24-27-27, 8⅝-in cas cmt 2395 ft.

SUMMERLAND—Summerland Oil Co.'s 1, 22-4-26, dr brown shale 3050 ft.

VENTURA COUNTY

FILLMORE—R. D. Clark's 11, 1-4-20, pumped some oil, dr deeper from 1200 ft. Keck Investment Co.'s RS 1, 33-4-20, dr 3500 ft. Sespe Oil Co.'s 2, sd 4005 ft.

HOOPER CANYON—Ruth J. Bishop's 1, 35-5-19, sd 200 ft.

MOORPARK—E. A. Parkford's Lloyd 1, sd 4005 ft.

OJAI—J. W. Hackworth's 1, 11-4-23, dr hard shale 917 ft.

OXNARD—Shell's McGrath 1, dr 1150 ft.

PIRU—Balso Chica Oil Co.'s 1, 5-4-18, lcn. Leonard Oil Co.'s 1, 4-4-18, dr 3927 ft. Petroleum Securities' Diablo 1, 26-5-10, sd 2400 ft. Pet. Producers' F-1, 17-4-18, sd 610 ft.

RINCON—Montecito Oil Producers' 1, 13-4-25, dr hard sand 3615 ft. Scott Petroleum's 1, 35-4-25, co 2470 ft.

RED MOUNTAIN—Miley Explo. Co.'s Casitas 2, 7-3-23, co 750 ft.

SANTA PAULA—W. W. Bryant's Anlauf 1, 21-4-21, dr 235 ft.

SATICOY—Standard's 3, 15-3-22, abn 1280 ft.

SIMI—E. F. Exline's 1, 33-3-21, rigging rotary. Shell's Berylwood 1, co 6300 ft, td 6420 ft; Strathern 1, 6-2-18, dr 3104 ft.

SOUTH MOUNTAIN — Ring Petroleum's Converse 1, dr sandy shale 3988 ft.

VENTURA—Star Petroleum's 1A, 13-3-23, dr hard sand 5291 ft.

MISCELLANEOUS

ALAMEDA COUNTY—Thomas & Hammill's 1, 16-3-3, co 1025 ft.

COLOUSA COUNTY—Colus Oil Co.'s 1, 31-15-4, dr 225 ft. Continental's 2, 31-18-4, fsh for dr pipe 4300 ft. Numa Oil Co.'s 1, 19-15-5, dr hard sand 358 ft.

FRESNO COUNTY — Fresno-Madera Oil Co.'s 1, 18-12-21, dr 3950 ft. Fresno-Untied Oil Co.'s 1, 23-15-18, sd 3960 ft. Superior Oil Co.'s 1, 18-21-17, rig.

HUMBOLDT COUNTY—Northern Oil Co.'s 2, dr 1753 ft.

KINGS COUNTY—Associated's Smith 1, 12-23-18, sd 2045 ft. Bolsa Chica Oil Co.'s 1, 30-23-19, sd 3500 ft. General Petroleum's 2, 22-26-18, dr brown shale 6600 ft. Milham Exploration's 1, 2-22-17, dr hard brown shale 6575 ft. Monocline Dev. Co.'s 1, 7-21-21, sd 4310 ft. Hugh McPhail's 1, 13-24-18, sd 2090 ft. South Soalingo Oil Co.'s 1, 35-24-19, dr sandy shale 3050 ft.

MADERA COUNTY — Fort Wayne-Madera Synd.'s 1, 22-10-17, may abn 2250 ft, for new hole.

MONTEREY—Marland Oil Co.'s 1, 32-24-12, rigging rotary.

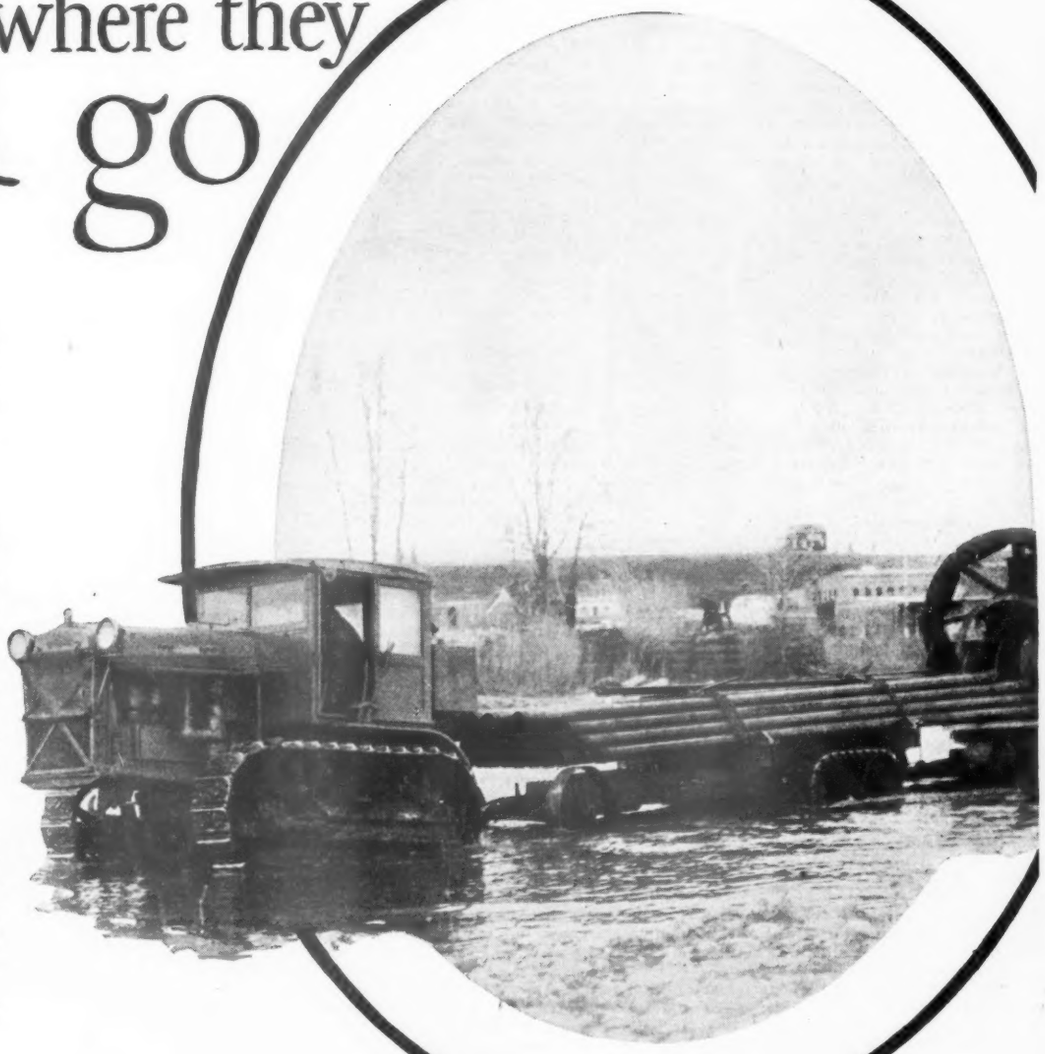
SAN LUIS OBISPO COUNTY — Arroyo Grande Pet. Co.'s 1, 21-32-13, plugged to 4363 ft for test. Barneyberg Oil Co.'s 2, 25-32-14, co 2270 ft. Miley Exploration's 1, 15-29-17, sd 2540 ft. Panorama Oil Co.'s 1, 7-31-21, co 2035 ft. Paso Robles Oil Co.'s 1, 34-27-13, ne report. Richfield Oil Co.'s 1, 10-29-17, dr hard shell 3085 ft. Painted Hills Oil Co.'s 1, 34-30-10, dr hard sand 1582 ft. San Luis Synd.'s 1, 29-31-13, dr shale 2195 ft. Waklin Petroleum Synd.'s 1, 27-27-11, dr hard sand 2616 ft. Union's 1, 34-32-15, dr brown shale 715 ft.

SAN MATEO COUNTY—Sequoia Oil Co.'s 1, 13-7-5, dr sandy shale 1160 ft. Shell's Cowell 1, 8-6-5, dr hard sand 5784 ft; Butts 1, dr shell 1710 ft.

SONOMA COUNTY—Shell's Murphy 1, 8-5-7; Mossi 1, 8-5-7, dr hard sand 1447 ft.

TULARE COUNTY—Ducor Drilling Co.'s 1, 29-23-27, sd 4160 ft. J. E. Neame's 1, 24-17-24, sd 2025 ft.

Athey Wagons *don't care* where they go



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LOUISIANA

BOSSIER PARISH—
Oil Ref. Corp., Fee D-32, 15-19-11 * 435

CADDO PARISH—
Ark. Nat. Gas Co., Lane 1, 13-21-15 * 4101

FRANKLIN PARISH—
Barbour Oil Co., Baker 1, 3-15-7e 6 * 2884

RICHLAND PARISH—
Moody & Seagraves, Osborne 1, 14-15-5e ..... * 2501

BIENVILLE PARISH—S. P. Borden's L. & A. 2, 1-15-8, sd 500 ft. E. J. Forrest's Perritt 1, 11-17-16, tested sw at 3000 ft.

BOSSIER PARISH — Atlantic Oil Prod. Co.'s Bain 1, 31-23-11, dr 2465 ft. Bahan & Bahan's Holmes 1, 36-23-12, set 6-inch at 3069 ft. R. L. Crook's Larkin 9, 14-19-11, lcn. Davis et al's Simpson 5, 14-16-12, dr 2200 ft. Doern et al's Bollinger 1, 9-22-11, sd 3900 ft. Ellis & Markley's Hunter 5, 14-16-12, dr 1025 ft. H. S. Goodwin's Tr.'s Mercer 1, 21-16-12, set 4½-inch at 1750 ft; Curtis 2, 36-17-13, dr 2110 ft. Hamiter et al's Hamiter 1, 10-23-13, sd 1870 ft. Humble's B. & W. 30, 15-19-11, dr 5117 ft. Magnolia's Cason 1, 1-22-12, set 13 3/8-inch at 442 ft. J. S. McCullough's Hodges 6, 25-16-12, set 10-inch at 105 ft. Northwest Gas Co.'s Bain 1, 31-23-11, testing 3076 ft. Natural Gas Prod. Co.'s Floyd 1, 25-23-12, rig. Palmer Corp.'s Roberson 1, 26-23-12, set 6 5/8-inch at 3065 ft; Caplis 10, 25-16-12, arr to deepen 1553 ft. R. O. Roy's Werner 1, 7-17-11, dk; Caplis 7, 25-16-12, dr 200 ft. The Texas Co.'s Peyton 1, 30-23-11, set 6¼-inch at 3063 ft; Wilkerson 2, 36-23-12, set 6 5/8-inch at 3072 ft. Sales & Walker's Kilgore 1, 31-23-11, sd 2815 ft. Walker et al's Antrim 1, 28-22-13, sd 2850 ft. Woodley & Collins L. & A. 3, 15-23-12, sd 3250 ft; Bain 1, 31-23-11, dr 2400 ft; Ballinger 1, 36-23-12, dr 2700 ft.

CADDO PARISH—Bee Oil Co.'s Muslow 1, 29-20-15, sd 1125 ft. J. W. Burton's Tr.'s Caldwell 8, 18-21-15, dk. Belchic & Laskey's Sharp 4, 10-18-14, coring 1150 ft; Sharp 5, 10-18-16, lcn. W. D. Chew's State 6, 34-21-16, dk. Dixie Oil Co.'s Robertshaw 81, 13-21-15, dr 3961 ft; Robertshaw 90, 14-21-15, wosr 4050 ft; Robertshaw 91, 14-21-15, rig; Robertshaw 92, 13-21-15, dr 3981 ft; Huckaby 4, 11-21-15, dr 3903 ft. Greenwood Prod. Co.'s Cooper & Ellebre 1, 15-18-14, pulled in dk 3230 ft. Haynes Bros. Spell 1, 15-21-15, sd 3911 ft; Spell 2, 15-21-15, sd 3092 ft. Magnolia's W. M. Bell 2, 6-17-16, set 13 3/8-inch at 200 ft; J. W. Furrh 1, 28-18-16, coring 2680 ft; Dillon 18, 24-21-15, dk; Dillon 21, 23-21-15, lcn; Robertshaw 22, 23-21-15, dr 3821 ft; Hampton A-8, 15-21-15, dr 3855 ft. Ohio Oil Co.'s Smith 25, 12-21-15, arr to abn 4369 ft. Pittsburgh O. & D. Herndon 1, 15-21-15, set 5 3/16-inch at 4004 ft. D. C. Richardson's Youree 8, 30-20-15, set 10-inch at 101 ft. Shreveport Oil Co.'s Muslow 2, 32-23-15, lcn. Simplex Oil Co.'s Baird 2, 22-20-15, set 10-inch at 83 ft; Thomas et al 3, 15-20-15, wosr 2355 ft. Standard Oil Co.'s Barry 12, 11-20-16, set 6-inch at 1443 ft; Stiles 190, 27-21-16, sd 1984 ft; Hart 18, 34-21-16, wosr 1836 ft. Superior Oil Co.'s Youree 8, 26-20-15; wosr 2318 ft. The Texas Co.'s C. M. L. 47, 23-21-15, sd 3657 ft; Herndon 7, 14-21-15, dk; Herndon 8, 14-21-15, flowing oil at 3705 ft; Herndon 9, 14-21-15, dr 3894 ft; Raines 19, 15-21-15, fsh 4457 ft; Noel B-13, 14-21-15, dr 3978 ft. Tubbs et al's Hijes 1, 16-14-16, dr 2708 ft.

CALDWELL PARISH—Grayson Oil Co.'s Crockett 1, 6-12-4, sd 2692 ft.

CATAHOULA PARISH — Lomhnager Oil Co.'s Beazley 3, 26-9-6e, coring 2000 ft. Standard Oil Co.'s Tensas 1, 23-8-5e, dr 3125 ft.

CLAIBORNE PARISH—El Dorado Chief Oil Co.'s Jones 1, rig. Rudeseale et al's Meadows 1, 20-21-7, pulled derrick down 2920 ft.

DE SOTO PARISH—American Controlled Oil Co.'s Lanier 2, 5-11-11, moving in rotary 2790 ft. J. H. Askew's Richardson 3, 25-13-11, wosr 2551 ft. Benson Oil Co.'s Wolf 2, 3-10-13, dr 1923 ft. Carlton Drlg. Co.'s Stevens 1, 12-11-16, sd 2300 ft. Dixie Oil Co.'s Jenkins 1, 9-12-11, dr 6084 ft. Foster et al's Johnson 1, 7-10-12, coring 3190 ft. Hazlett-Simmons Neely 2, 1-14-12, sd 1925 ft. R. O. Roy's Lee 1, 33-14-12, dk; Whittaker 1, 4-13-13, dr 40 ft; Tracy 1, 3-13-13, rig. Reliance Drlg. Co.'s Jones 1, 8-11-14, sd 3018 ft. The Texas Co.'s Grand Bayou P. Co. 5, 25-23-12, set 6-inch at 2415 ft. Wingfield et al's Haygood 1, 18-10-12, sd 2400 ft.

FRANKLIN PARISH—Pittsburgh O. & D. Co.'s Moore 3, 12-11-6e, sd 2501 ft. La. Pet. Co.'s Tensas 1, 11-11-6e, sd 2503 ft.

GRANT PARISH—W. D. Ball et al's Elias & Williams 1, 10-7-4w, tested dry 2104 ft. Swope et al's Fee 5, 18-19-1e, sd 1607 ft; Fee 5, 18-19-1e, dr 700 ft.

LA SALLE PARISH — Elbert Pet. Co.'s Urania B-3, 7-10-2e, sd 700 ft. Wingfield et al's Gibson 2, 2-9-1e, sd 3073 ft.

MADISON PARISH—W. S. Smith's Yerger 1, 51-16-14e, arr to deepen 1700 ft.

MOREHOUSE PARISH — Chas. Bennett's Davis 1, 21-20-4e, dk. Moody & Seagraves' Wolfe 1, 13-20-4e, testing 2168 ft; Wolfe & McEnnis 1, 13-20-4e, set 12½-inch at 165 ft. The Texas Co.'s Meyer 1, 15-22-7e, sd 2162 ft. United Carbon Co.'s Atkins 1, 26-20-5e, dk.

NATCHITOCHES PARISH — Lawson & Pharris' Crowell Lbr. Co. 1, 22-5-6w, dr 2566 ft.

OUACHITA PARISH—Coco Bend O. & G. Cordell 1, 23-15-3e, 2560 ft. J. M. Huber's Edwards 4, 1-18-4e, testing 2211 ft. Imperial O. & G. Co.'s Tubbs 4, 13-19-3e, testing 2212 ft. Jordan Drlg. Co.'s Slagle 1, 48-18-4e, dk; McGee 2, 10-18-4e, set 8-inch at 874 ft; Pereboon 1, 32-19-4e, dk. Moody & Seagraves U. S. Govm't 1, 1-19-3e, set 6-inch at 2127 ft. Nat. G. & F. Corp.'s McEnery 1, 21-19-4e, rig. Ouachita Nat. Gas Co.'s Smith 8, 37-20-4e, set 6-inch at 2081 ft. Peerless Carbon Co.'s Moore 3, 49-20-4e, dr 2015 ft. Palmer Corp.'s Central 2, 1-19-4e, set 8-inch at 830 ft. Southern Carbon Co.'s Phillips 3, 8-19-4e, set 6-inch at 2119 ft. United Carbon Co.'s Nelson Fee 2, 6-19-5e, ste 12½-inch at 192 ft.

RAPIDES PARISH—Collins Bro.'s Allen 1, 25-5-1w, sd 2200 ft. Minnesota Oil Corp.'s Mark 2, 13-5-4w, sd 12 ft.

RICHLAND PARISH—J. M. Fuller's Boise 1, 33-16-6e, lcn. Gulf Ref. Co.'s Millsaps 1, 8-17-6e, r 2705 ft; Rhymes 3, 28-17-16, sd 2005 ft; Weymond 1, 20-18-6e, set 6 5/8-inch at 2290 ft; Moody & Seagraves Hemler C-1, 29-16-6e, blow out No. 56 2503 ft; LaFlouer 1, 18-16-6e, arr to test 2465 ft; McDonald 1, 9-15-5e, set 6-inch at 2283 ft; Sorter C-1, 17-16-5e, dk. Nat. G. & F. Corp.'s Sartor B-3, 19-16-6e, lcn; Sartor BB-4, 18-16-6e, lcn; Thomason A-2, 21-16-6e, set 20-inch at 20 ft; Thomason A-3, 21-16-6e, set 20-inch at 20 ft. Noe & Meredith Tr.'s Broughton 1, 4-15-6e, dr 1960 ft. Oliver & Master's Hatch 1, 2-15-5e, dk; Hatch 2, 2-15-5e, dr 1400 ft. Ouachita Nat. Gas Co.'s Cummings 1, 24-17-5e, set 6-inch at 2309 ft. Palmer Corp.'s Wayne 2, 23-16-5e, plugged back to 2475 ft. Ruston Drlg. Co.'s Sartor 1, 17-16-6e, d 2430 ft. Southern Carbon Co.'s Sartor 2, 26-16-6e, dr 2070 ft; Sartor 3, 18-16-6e, dk; Swann 1, 18-16-6e, set 8-inch at 853 ft. United Carbon Co.'s Mulhern 1, 20-16-6e, set 6-inch at 2279 ft.

SABINE PARISH—S. P. Borden's Hamlin Est. 1, 28-10-13, set 12½-inch at 143 ft. Clark-Seip et al's Moore 1, 32-10-12, sd 3290 ft. Dixie Oil Co.'s Steinfeld 1, 20-10-12, tested dry 3364 ft. Doern et al's Pickering Lbr. Co. 1, 17-4-11, dr 2150 ft. L. H. Emlet's Bowman Hicks 6, 8-7-12, sd 3710 ft; Bowman Hicks 7, 11-7-14, fsh 3822 ft; Mansfield H. L. Co. 1, 15-17-14, ringing up on third hole. Ruffian et al's McElroy 1, 33-10-12, dr 2012 ft.

UNION PARISH—Barbour Oil Co.'s Tugwell 1, 21-22-1e, dr 2213 ft. Carter et al's Security Trust 1, 7-23-1e, s d2250 ft. Industrial Gas Co.'s Hill 2, 9-20-3e, set 12½-inch at 187 ft. Interstate Nat. Gas Co.'s Parks 1, 23-20-3e, dk; Stephenson 1, 6-21-4e, lcn. Nat. Gas Prod. Co.'s Waldrop 1, 7-21-3e, set 6-inch at 2067 ft. John Potts, Agt.'s Bernstein 1, 30-20-4e, set 6-inch at 2105 ft. Ruston Drlg. Co.'s Steele 1, 36-20-3e, set 8-inch at 830 ft.

WEBSTER PARISH — Humble's Babb 5, 14-21-10, testing 4596 ft. S. A. Lane's Miles 1, 24-17-9, sd 1469 ft. C. H. Lyon's Porter-Wadley 1, 36-23-10, set 10-inch at 304 ft. Magnolia's Camp 1, 36-23-10, dk. Aarnes Cox 3, 22-21-10, dk; Mixon 1, 22-21-10, dr 4025 ft; Cole 1, 27-21-10, set 6 5/8-inch at 4340 ft; Munn 1, 29-23-9, No. 7½ at 2700 ft arr to reset 2705 ft; J. L. Munn 1, 36-23-10, arr to test 2689 ft; R. J. Munn 1, 29-23-9, dr 975 ft; D. G. Cox 1, 22-21-10, dr 4218 ft. Harry Morris et al's Lewis 1, 15-23-9, rig. Ohio Oil Co.'s Crichton 2, 21-21-10, dr 3958 ft; Bodcaw 38, 15-21-10, dr 4119 ft. Woodley Pet. Co.'s Cox B-1, 23-21-10, cemented back to 4512 ft. C. H. Lyons Sexton 1, 36-23-10, (formerly J. K. Wadley's) set 6-inch at 2650 ft.

WINN PARISH—Ohio Oil Co.'s Rolen Account 2, 5-12-1w, dr 4454 ft. H. M. Roark's Southern Mineral Co. 3, 9-11-3w, set 6 5/8-inch at 935 ft.

WEST CARROLL PARISH — Palmer Corp.'s White 1, 2-19-10, plugged back 2445 ft and now sd.

EAST TEXAS

SHELBY COUNTY—
William Sebastian, Pickering Lbr. Co. 1, T. F. Polly sur ..... * 2923

ANDERSON COUNTY — Brooks et al's Henby 1, Joseph Mertz sur, dk. Humble's Tom Jones, Jr., 1, David Roberts sur, rig.

CASS COUNTY—Hickman et al's Mott 1, A. Douthit sur, set 12½-inch at 202 ft.

CAMP COUNTY—J. C. Rogers' Boyd 1, R. M. Montgomery sur, sd 750 ft.

CHEROKEE COUNTY — Panhandle Oil Co.'s Whalen 1, J. Jordan sur, sd 1300 ft. Joe Walter et al's Barns & DeLoach 1, Perry Reese sur, r 979 ft.

FREESTONE COUNTY — Roxana Pet. Corp.'s Marshall 1, D. E. Marshall sur, abn 777 ft.

HENDERSON COUNTY—W. K. Cayton et al's Hoffer & Nash 1, H. Jefferson sur, sd 2910 ft.

HARRISON COUNTY—Cox et al's Furrh 1, J. Short sur, tested dry 1020 ft. Doney et al's Furrh 2, J. Lipscomb sur, dk. Magnolia's Vincent 1, R. W. Bedford sur, set 6-inch at 1886 ft. Mitchell et al's Jones 1, J. Lipscomb sur, sd 957 ft. States Line O. & G. Co.'s Waterman 6, J. Short sur, tested show of gas at 2836 ft; Mrs. Z. Abney 4, J. Short sur, testing 956 ft. Tylong O. & G. Co.'s Armstrong 1, S. Holloway sur, coring 1984 ft.

MARION COUNTY—Lumbermans Oil Co.'s Bonham 1, R. Potter sur, sd 1200 ft.

NACOGDOCHES COUNTY—P. R. Harris et al's Griffin 1, J. W. Anderson sur, sd 1301 ft. Stein & Lewis' Birdwell 1, Jose A. Chirino sur, arr to deepen 1100 ft. Union Sulphur Co.'s Whitemark 1, Jose A. Chirino sur, hole junked 2812 ft.

PANOLA COUNTY—S. H. Gardner et al's Roquemore 3, B. C. Jordan sur, set 6-inch at 2211 ft; Craven 1, Ben C. Jordan sur, rig. H Hines' Jones 1, G. Goodwin sur, sd 2514 ft. Magnolia's Sol Oden 1, E. F. Mitcheson sur, set 6 5/8-inch at 2301 ft; Tilberry 1, Jane Thorpe sur, coring 1929 ft; Baker 3, B. C. Jordan sur, set 13 3/8-inch at 158 ft; Leigh Trosper 1, B. Stephens sur, coring 1943 ft; Steele 14, B. C. Jordan sur, r 1920 ft. Nat. G. & F. Corp.'s Adams 1, Evans Braken sur, set 6-inch at 844 ft; Adams 2, Evans Braken sur, rig. D. Thomasson's Crenshaw 3, J. Womack sur, sd 107 ft.

RUSK COUNTY—C. M. Joiner et al's Bradford 1, Ximinex sur, sidetracking bit 1110 ft. Magnolia's Dur en 1, Agulla Norris sur, dk. McCurrie et al's Sparks 1, Jesse Coarse sur, sd 2148 ft. D. Osborne et al's Matthews 1, D. Cortinas sur, sd 2330 ft.

SHELBY COUNTY—Magnolia's Pickering Lbr. Co. 1, Wm. J. Crane sur, coring 3770 ft.

SMITH COUNTY—Humble's Van Hovenberg 1, Nancy Childs sur, coring 567 ft.

UPSHUR COUNTY—S. W. Richardson's Newsome 1, J. R. Davis sur, sd 2025 ft; Minor 1, A. Lowery sur, fsh 3500 ft.

ARKANSAS

LAFAYETTE COUNTY—
Ken Saw Pet. Co., Fee 1, 31-19-24.. * 3620

BRADLEY COUNTY—Johnson & Adams' Southern Lbr. Co. 1, 12-12-12, dr 2520 ft.

CLARK COUNTY—McKenzie Oil Co.'s Baken 1, 9-11-19, tested fresh water 646 ft.

COLUMBIA COUNTY — Mitchell et al's Franks 1, 25-19-22, sd 150 ft. Van Hagen Synd.'s Pickler 1, 19-19-22, sd 850 ft; Mason 1, 31-19-22, rig.

GRANT COUNTY—Jones et al's Meeks 1, 5-4-11, sd 1400 ft.

LINCOLN COUNTY—Pine Prairie O. & G. Co.'s Carter 1, 33-10-6, sd 2176 ft.

LITTLE RIVER COUNTY—Grote et al's Allen 1, 2-13-31, sd 2941 ft.

MILLER COUNTY—Dave Bruton et al's Red River Farm 1, 2-17-26, rig. Guess et al's Saunderson 1, 14-15-26, dr 3024 ft. Lenze et al's Dale 3, 23-15-25, rig.

NEVADA COUNTY—Ames & Zingg's Womack B-1, 10-14-21, wosr 1215 ft. McDonald et al's Pell 1, 9-15-22, sd 2424 ft. J. J. O'Brien's Haynie B-5, 1-14-21, plugged back to 1163 ft; Moss A-17, 1-14-21, rig.

OUACHITA COUNTY—Little Fay Oil Co.'s

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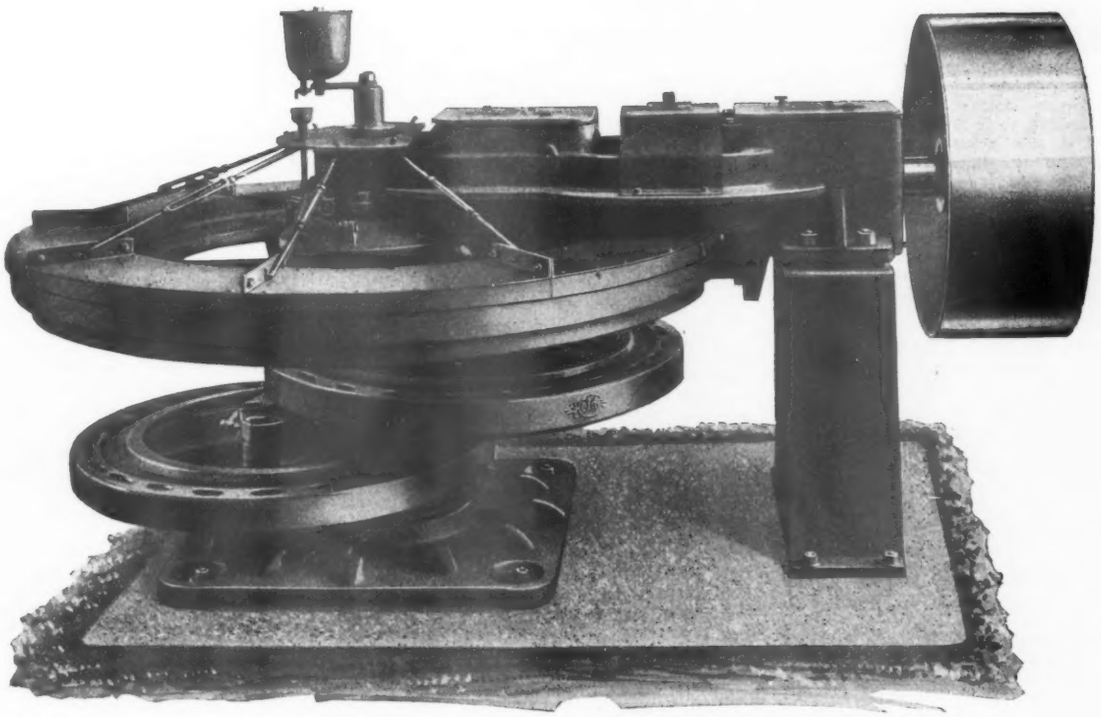

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Robertson 4, 25-15-16, set 10-inch at 65 ft. Standard Oil Co.'s Goodwin B-1, 6-16-15, testing 2648 ft. Ohio Oil Co.'s Cramer 7, 22-15-16, dk.

UNION COUNTY—C. H. Allison's Fitzgerald 10, 17-18-15, running sand pump at 2175 ft. Grimes Bro.'s Hill 2, 7-18-14, dk. E. M. Jones' Crain 3, 2-17-14, dr 3805 ft. W. R. Keever's Kavanaugh 1, 12-17-15, set 6 5/8-inch at 2139 ft. Lion O. & R. Co.'s Leverette 1, 11-16-16, dr 2735 ft; Murphy D-7, 8-16-15, wosr 2465 ft. Laurel O. & G. Co.'s Houston 1, 12-16-16, dr plug 2721 ft. Lyall et al's Stegall 1, 11-17-13, dr 575 ft. Magna Prod. Co.'s Rowland 1, 14-17-14, set 6 5/8-inch at 2992 ft. Magnolia's Carroll 2, 1-17-14, sd 1500 ft; Laney 3, 8-16-16, dk; Laney 4, 8-16-16, dk. Mellon Tr.'s Van Hook 1, 7-18-14, dk. Mountz et al's Pratt 6, 8-18-15, tested show of oil and gas at 2147 ft. C. E. Murdock's Murphy 2, 17-16-15, sd 2117 ft. Morefield et al's Hill 1, 7-18-14, wosr 2228 ft. National Cons. Pet. Corp.'s Fagg 1, 8-16-16, wosr 2643 ft. Ohio Oil Co.'s Crain 4, 1-17-14, dk; Goode 2, 2-17-14, sd 3054 ft. Oil Well Corp.'s Dumas 1, 11-17-14, coring 3072 ft; Townsend 1, 10-17-14, tested dry 2829 ft. Pitcher et al's Arkansas Timber Co. 1, 21-17-11, sd 3107 ft. Pure Oil Co.'s Gregory 1, 10-17-14, sfh 2552 ft. Dr. Rushing et al's Gregory 1, 11-17-14, set 6 5/8-inch at 2735 ft; Gregory 2, 11-17-14, dr 1720 ft. Rovenger Oil Corp.'s Perdue 1, 2-17-14, dk; Perdue A-1, 10-17-14, rig. Semroll et al's Finley 1, 12-17-14, arr to test 2710 ft. Timberlake et al's Dumas 1, 11-17-14, rig. W. R. KeKever's Ezell B-2, 12-17-15, sd 120 ft.

MOUNTAIN STATES

WYOMING

ALBANY—Union of California, 33-17-75, rig.

BIG HORN—Agate Oil Co., ne 13-51-92, plugged back and cemented at 842 ft. Utah-Southern Oil Co., 3, 29-56n-97w, dr below 2600 ft. Wisconsin-Himes, 9-54-94w, delayed by title trouble, sd at 673 ft. Northern Wyoming Oil Co., 20-52n-93w, dr 1100 ft.

CARBON—Graybeal Synd, 16-28-91, sd 4380 ft.

CONVERSE—A. E. Tylee, ne 8-32-72, sd. Criterion Oil Co., Irvine 1, 5-31-70, bailing water, td 3579 ft. John Ackard, McKinley 1, 21-31-69, sd 3000 ft.

FREMONT—Producers & Refiners, Muskrat 1, 34-34-92, carrying 10-inch. Texas Production Co., Alkali Butte 1, 1-33-92, dr 2140 ft. Zola Oil Co., Crook's Gap 1, 25-27-93w, sd 3750 ft. Iowa-Wyoming Inv. Co., 30-1s-2e, bottomed at 1500 ft.

JOHNSON—Fairway Oil Co., Crazy Woman 1, 7-47-82, showing oil at 2162 ft. Tarrant Syndicate 2, 17-46n-82w, sd 3625 ft.

LINCOLN—Fontenelle Oil Co., 1, ne ne 1-24n-113w, will resume March 1, Calif. Co., Snyder Basin 1, 11-29n-115w, td 1117 ft, standing cemented. Will resume in the spring.

NATRONA—Combs Dev. Co., 12-39-78, dr 1825 ft.

NIOBRARA—Penn-West. Pete Co., 13-35n-62w, bottomed 800 ft. Hollingsworth Bros., 17-39-79, fsh.

PARK—Union of Calif., Taylor 1, 22-47-101, dr 3564 ft. Fred G. Ostland, Hoodoo Ranch 1, 23-51-101, sd 1740 ft. Honolulu Oil Co., Four Bear 1, 29-48-103, sidetracking casing at 2780 ft. E. H. Rosenburg, ne 25-58n-98w, dr 1300 ft. Ydoc Oil Co., ne 6-51n-101w, sd 915 ft. Honolulu Oil Corp., Pitchfork 1, 14-48n-102w, lcn. Hoodoo Oil Co., 36-51-101, redr 400 ft. Ohio Oil Co., 27-53-101, dr 1918 ft.

PLATTE—Walter Adams, Trustee, 13-25-66, no report.

SWEETWATER—Boar's Tusk Oil Co., 16-23-104, hole obtsructed at 710 ft, td 1536 ft. Prairie O. & G. Co., Tucker 1, 18-13-99, sd 150 ft. P. & R-Marland of Colo., 26-20-104, sd 485 ft. Tower Pet. Co., 6-14n-103w, dr 600 ft, carrying 15½-inch. Custer Pet. Co., 24-12-100, dr 1050 ft.

WASHAKIE—Unnamed persons, ne 15-44-64, dr suspended for the winter at 600 ft.

WESTON—Gose Synd. ne 28-47n-65w, trying to pull 4¾-inch, td 4850 ft.

UINTA—Uinta O. & D. Co., 21-51-120w, dr below 2000 ft. Evanston O. & G. Co., 27-15-120, diamond dr below 540 ft. Calif. Co., 1, 12-17-116, moving in material. Wilcox & Henley, se 3-14n-118, dr below 400 ft.

NEW MEXICO

CHAVES—Buffalo-Roswell 1, 24-11-27, sd 4300 ft. Arena Oil Co., 1, 19-13s-31e, run 8¼-inch to 2503 ft, td 2504 ft. McQuigg Bros., Neis 1, 7-5w-29e, standing at 1525 ft. Berrendo O. & G. Co., Roswell 1, 5-10-27, spudding 175 ft.

CURRY—Hasson Pet. Co., Laird 1, 22-8-36, spudded and sd. Clovis O. & G. Co., Hoskinson 1, 21-3n-36, sd 4010 ft.

GUADALUPE—Hanchett Oil Co., Rutherford 1, 24-8-24, sd 4260 ft. Union Pet. Co., McMullen 1, 24-5n-16, sd 235 ft. Navajo Oil Co., Goard 1, 10-31-7, standing at 2538 ft.

LEA—Midwest Ref. Co., State 1, 9-19s-38e, rigging up, td 1560 ft. Marland Oil Co., 1, 19-26-37, dr 530 ft. Marland Oil Co., No. 1 Seideman, 4-25s-36e, lcn. Marland Oil Co., No. 1 Roberts, 20-23s-35e, lcn. No. 1 Gardner, 34-23s-31e, lcn.

McKINLEY—Smart & Reid, 7-17-9, rig. Inland Oil Corp., 22-18-10, dr. S. Dysart 1, 21-14-9, sd 1650 ft. Continental Oil Co., Carrica 1, sw 9-17n-7w, dr 3185 ft. Jenkins Oil Co., 1, 7-16n-9w, td 1301 ft. Williams et al, 2, 30-18-8w, standing at 1795 ft. Reliance Oil Co., Valentine 1, 16-17-9, dr 1300 ft. Producers & Refiners Hospah 2, 12-17-9, dr 1140 ft.

QUAY—Gibson Oil Corp. 1, 25-8-32, preparing to deepen, td 3500 ft.

SAN JUAN—Continental Oil Co., Munoz 17, 2-29-19, dr 4507 ft. Kansas-Colorado Oil Co. Atterberry 1, 23-21-11, sd 1850 ft. T. C. N. Oil Co., Lanier 1, 9-29-11, sd 547 ft. Huntington Park Oil Co., 2, 20-30-9, dr 4340 ft. Nollschet al, Mullen 1, 31-29n-9w, dr 250 ft. R. M. Smith, Abrams 2, 23-29-11, standing at 532 ft. Huerfano Oil Co., Witlbank 1, 25-29-11, standing 800 ft. Union Oil & Mining Co., Pine 2, 8-29-9, cleaning out at 2950 ft. San Juan Pet. Corp., 1, 9-29n-13w, dr 2790 ft. A. Johnson, Trustee 1, 34-29n-11w, dr 1725 ft. Poole & Peebles, Lawson 1, 9-30n-11w, drg 860 ft. Co-Ne-Mo 1, 28-29-11, sd 100 ft. Kirtland Drilling Co., Stallings 1, 10-29-15, sd 500 ft.

SOCORRO—Abo Oil Co., 1A, 14-3s-6e, set 12½-inch at 600 ft and sd.

TORRANCE—Duran Dome Oil Co., 1, 31-2-14, dr 1587 ft. F. G. Wilson, Trustee, Pace 1, 12-6n-27, standing 2215 ft. Bluhall O. & G. Co., 20-6n-10e, wtg casing, td 890 ft. San Juan Coal & Oil, Randall 2, 26-6n-10e, dr 5150 ft.

VALENCIA—Acme Oil Co., 26-6-3, under 2210 ft.

COLORADO

ARCHULETA—Kansas-Colo Oil Co., 17-34-2w, will resume at 1300 ft.

BACA—Phillips-Jones, Jones 1, 26-34-48w, sd 1745 ft.

BOULDER—Left Hand Oil Co., Prechtl 1, 34-3n-70, casing trouble at 2057 ft. Essok Oil Co., Martin 1, 5-1s-70, sd 5225 ft.

EL PASO—Grand Union Oil Co., No. 2 John Jr., 19-17s-67w, sd 775 ft.

ELBERT—Botts, Likkick et al, se 1-8s-59, dr below 600 ft.

HUERFANO—Kinney-Coastal Oil Co., Pine 1, 24-26s-68w, dr 933 ft.

JACKSON—North Park Oil Co., Goettler 1, 9-6n-82w, standing at 506 ft.

JEFFERSON—Woods et al 1, 30-3s-69, lcn. Will spud March 1.

LAS ANIMAS—Parker Club, Inc., Adams 1, 32-34-55, operations suspended 3905 ft. Foley & Goldsworthy, Government 1, 11-30-50, standing 2010 ft. Reiter-Foster & Phillips, 23-29s-56, dr 1150 ft.

LA PLATA—East Long Beach Oil Co., Aspaas 1, 10-34n-11w, set 10-inch at 902 ft. Detroit Oil Ass'n, Olbert 1, 9-35-12w, dr at 1,640 ft.

LARIMER—Five Square O. & G. Co., State 1, 16-4n-69w, standing at 305 ft.

LOGAN—Northeastern Colo. Oil Co., State 1, 36-8n-55w, sd 5582 ft.

MESA—Eureka Oil Co., 1, 24-1s-1e, building rig.

MOFFAT—Ohio Oil Co., Kuykendall 1, 22-21n-11w, sd for the winter. Reiter-Foster Oil Co., State 1, 16-12-100, sd 2240 ft. Yarg Producing & Ref. So., No. 205, 26-4n-92w, dr 3460 ft. Alliance Oil Co., Milliken 1, 14-4n-92w, dr 850 ft.

MONTEZUMA—Coon & Cotton, Hall 1, 9-35n-13w, sd 1400 ft.

MONTROSE—Indian Pet. Corp., Gilmore 1, 4-45-16w, shut down at 4210 ft.

RIO BLANCO—Texas Prod. Co., Freeman 1, 27-3-94, dr 5327 ft. Argo Oil Co., sw 9-2s-96w, standing ready to spud.

ROUTT—Great Western Oil Co., State 1, 17-60n-56w, standing at 1700 ft.

WELD—Platte Valley Pet. Corp., Patterson 1, 24-6n-61w, dr 3747 ft.

MONTANA

BIG HORN—Selig Oil Co., 1, se 21-6s-35, sd 865 ft, negotiating to complete.

CARBON—Ohio Oil Co., Northern Pacific 1, 11-7s-21e, dr 3710 ft. Atlantic Oil Co., 3, 20-7s-24e, dr below 1005 ft.

CASCADE—Lone Star, McLean 1, 12-21n-3w, sd 100 ft.

CHOTEAU—Geraldine O. & G. Co., sw ne 1-21-11e, rigged.

FERGUS—Melton Corp., Fenholt 1, 24-21-17, sd 2290 ft. Mineral Research Oil Co., 1, 13-17-23, bottomed at 843 ft. Will resume with diamond drill.

GARFIELD—Carrol Bros., nw ne 6-14n-31e, standing ecmented at 1440 ft.

GLACIER—Rimrock Oil Co., 29-35-5w, rig.

HILL—A. H. McFarland, sw 15-30-13e, sd 100 ft. Gad-Hamilton et al, Goldstone 1, sw 25-35-9e, rig. T. P. Jones et al, Perkins 1, 34-33-12e, waiting for casing at 350 ft.

LIBERTY—Bear's Den Oil Co., Laird 1, 31-37n-6e, underr 8-inch at 2300 ft. Sunburst O. & R. Co., Disotell 1, 10-37-5e, gas in Ellis at 2878 ft, oil in Kootenai at 2686 ft, dr 2950 ft.

MADISON—Madison County Oil Co.'s 1, ne 17-7s-1w, sd 1700 ft.

MUSSELSHELL—Manhattan Oil Co., ne 24-7-24e, sd 60 ft. McElwain Oil Dev. Assn., 2-11-22, rig.

RICHLAND—Community Drill Co.'s Pioneer 1, rigging to dr deeper from 2600 ft.

ROOSEVELT—Pioneer O. & G. Co.'s 1, se 35-27-51w, dr in oil shale at 2715 ft.

PONDERA—Claggett Dev. Co., 8-27-4w, spd and sd. Continental Dev. Co., sw 19-27-3w, dr 1850 ft.

PHILLIPS—Big Dome Oil Co.'s Bloomberg 1, ne 1-32-32e, sd 980 ft.

SWEETGRASS—Shoshone Consolidated, nw 23-2n-15w, resuming at 2420 ft.

TETON—Continental Dev. Co.'s Ritmoure 1, 8-27-5w, dr 1100 ft. Craig-Speer-McCutcheon, 9-23-2w, dr 100 ft.

TOOLE—Hi-Line-66's Toole 1, ne 27-36n-2e, dr 2370 ft. Sunburst O. & R. Co.'s Grandview 1, 10-34n-32, rig. Madeline Oil Co.'s Swenson 1, 33-35-4w, dr at 950 ft.

KANSAS

BARBER COUNTY— T 30s, R 14w, Sec. 27, Rowland et al's Pickens 1, owd, nec nw ne, sd 3196 ft. T 31s, R 12w, Sec 17, Merriman et al's Winter 1, c n½ dr 3445 ft. T 33s, R 12w, Sec 19, Schaffer et al's Boggs 1, c sw, dr 4550 ft. T 33s, R 13w, Sec 2, Schaffer et al's Carter 1, c se se, dr 3870 ft.

BARTON COUNTY—T 20s, R 13w, Sec 12, Everette & Wiley's Ward 1, nwc sw, sd 3490 ft.

BUTLER COUNTY—T 25s, R 4e, Sec 18, Wichita Drilling Co.'s Joseph 1, nec se nw, sd 2265 ft. T 27s, R 3e, Sec 24, La Rob Oil Co.'s Baysinger 1, nec sw, rig. T 27s, R 5e, Sec 26, Cress, Frank et al's Bryson 1, nec, spd and sd. T 28s, R 8e, Sec 21, Burford & Brimm's Ferris 1, sec ne sw, lcn. T 29s, R 4e, Sec 21, E. Wilcox et al's Holcomb 1, nec se nw, sd 1456 ft.

CHASE COUNTY — T 21s, R 7e, Sec 9, Greener, Fowler et al's Carson 1, nec, dr 1925 ft.

CHAUTAUQUA COUNTY—T 32s, R 8e, Sec 15, Roth & Faurot's Hamil 1, nwc sw nw, lcn. T 32s, R 9e, Sec 33, Manhattan Oil Co.'s Payne 1, sec nw nw, dr 690 ft.

CLARK COUNTY—T 31s, R 23w, Sec 16, Walker & Walner's Mitchell 1, swc ne, sd 420 ft.

CLOUD COUNTY—T 6s, R 4w, Sec 6, Concordia Oil Co.'s Murdock 1, sec, sd 3590 ft.

COFFEY COUNTY—T 22s, R 15e, Sec 9, Garland et al's Goff 1, sec sw se, D. & A. 950 ft Sec 11, Clark et al's Douglas 1, nwc se ne, sd 1115.

COWLEY COUNTY—T 30s, R 3e, sec 3, Vickers Pet. Co.'s Daniels 1, nwc ne, sd 1650 ft; sec 32, Derby Oil Co.'s Seaman 1, nec se ne, sd 2640 ft. T 30s, R 6e, sec 20, Allison & Fitzwilliams' Manley 1, nec nw se, sd 300 ft. T 31s, R 4e, sec 14, Trees Oil Co.'s King 1, swc se ne, dr 1425 ft. T 31s, R 5e, sec 4, Tatlock et al's Elliott 1, owd, nwc se, sd 3422 ft.

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T 32s, R 6e, sec 12, Trees Oil Co.'s Estus 1, sec nw, fsh 1300 ft. T 33s, R 4e, sec 4, White Oil Co.'s White 1, swc ne, rig. T 33s, R 5e, sec 12, Roth & Faurot's Richardson 1, c sw sw, mach. T 34s, R 3e, sec 10, Shawver et al's Amena 1, nwc, fsh 1400 ft.

DICKINSON COUNTY—T 16s, R 4e, sec 2, Skow & Ritchey's Will 1, c nw nw, lcn; sec 35, Harwood & Winters' Uteck 1, swc se nw, ur 2535 ft.

ELLIS COUNTY—T 13s, R 16w, sec 26, Tatlock et al's Leiker 1, nwc ne ne, sd 3246 ft.

FRANKLIN COUNTY—T 16s, R 18e, sec 17, Smith, Thrice & Fisher's Owens 1, cel e½ e½, sd 1450 ft. T 17s, R 17e, sec 25, Omar O. & G. Co.'s Bush 1, sec sw, lcn.

GEARY COUNTY—T 10s, R 5e, sec 16, Brinkley et al's Fawley 1, nec nw ne, sd 2502 ft.

GREENWOOD COUNTY—T 24s, R 13e, sec 4, Carnes & Bly's Smith 1, nec se, dr 800 ft. T 26s, R 9e, sec 6, Kiskadden et al's Wilkerson 1, nec se sw, lcn. T 26s, R 11e, sec 22, Devine et al's Bradford 1, swc ne, sd 600 ft. T 26s, R 12e, sec 20, Smith & Rockhill's McNair 1, nwc se, dr 750 ft. T 27s, R 13e, sec 28, O. W. Culp et al's Smith 1, c ne se, sd 1540 ft. T 28s, R 12e, sec 1, Swanson et al's Hayes 1, sec nw ne, sd 1600 ft.

GRAHAM COUNTY—T 8s, R 25w, sec 27, Gulf Coast Drlg. Co.'s St. John 1, owd, swc nw se, sd 3450 ft.

HARPER COUNTY—T 34s, R 6w, sec 24, Amerada Pet. Corp.'s Mendenville 1, c se se, fsh 4050 ft.

JEFFERSON COUNTY—T 9s, R 19e, sec 13, Northern Counties Oil Co.'s Edwards 1, sec nw nw, sd 2405 ft. T 10s, R 17e, sec 19, Wichita Oil Co.'s Simpson 1, nwc sw sw, lcn.

LABETTE COUNTY—T 33s, R 17e, sec 1, Cowell et al's Hornbeck 1, swc ne sw, sd 1375 ft.

LYON COUNTY—T 21s, R 10e, sec 14, Hawks et al's Schroeder 1, sec sw, fsh 1720 ft.

MARSHALL COUNTY—T 4s, R 7e, sec 4, Marshall Oil Synd.'s Finn 1, nwc ne ne, sd 2606 ft.

McPHERSON COUNTY—T 17s, R 3w, sec 1, Lamar et al's Lamar 1, sec, sd 3600 ft. T 20s, R 3w, sec 20, Polar Oil Co.'s Dary 1, c nw, spd and sd.

MARION COUNTY—T 17s, R 4e, sec 31, Givins et al's Ucker 1, swc ne, dr 2550 ft. T 18s, R 4e, sec 20, Skow et al's Melcher 1, c ne se, dr 2000 ft. T 18s, R 5e, sec 31, Anderson et al's Benthe 1, sec sw sw, dr 1920 ft. T 19s, R 4e, sec 17, Frank et al's Reed 1, nwc, sd 2406 ft. T 21s, R 1e, sec 1, Sun Ray Oil Co. et al's Lehrman E1, swc ne se, sd 2710 ft.

MEAD COUNTY—T 33s, R 28w, sec 9, Blackwell O. & G. Co.'s Lilly 1, c se, sd 3310 ft.

MORRIS COUNTY—T 14s, R 7e, sec 32, Klein et al's Barber 1, sec nw, rig. T 16s, R 9e, sec 22, Lambert et al's Southard 1, swc se, lcn. T 17s, R 5e, sec 30, Graham et al's Nelson 1, nec se, dr 1000 ft.

NEMEHA COUNTY—T 3s, R 11e, sec 19, Nemeha O. & G. Co.'s Myers 1, nwc, sd 3050 ft.

OSBORNE COUNTY—T 9s, R 15w, sec 30, Davis et al's Prather 1, sec sw, sd 2360 ft.

OSAGE COUNTY—T 15s, R 15e, sec 3, Barber et al's Lease 1, c se se, sd 260 ft. T 15s, R 16e, sec 27, West et al's Baley 1, swc ne, sd 800 ft. T 17s, R 17e, sec 8, Mull Vit Dev. Co.'s Neil 1, nwc sw ne, dr 2931 ft.

POTTAWATOMIE COUNTY—T 10s, R 12e, sec 11, Crawford et al's St. Mary 1, swc, sd 2290 ft.

RENO COUNTY—T 22s, R 4w, sec 6, Danciger et al's Williams 1, nec sw se, rig.

RILEY COUNTY—T 10s, R 7e, sec 20, Youker et al's Theirer 1, nwc, sd 3028 ft.

ROOKS COUNTY—T 8s, R 16w, sec 14, Krueger et al's Poor 1, nec, spd and sd. T 10s, R 16w, sec 3, Derby Oil Co.'s Kruse 1, nec nw ne, ts 3075-3141 ft, td 3167 ft, shot 60 qt, 35 bbl; sec 28, Streeter & Stearns' Mattison 1, c nw, dr 3293 ft, show oil. T 10s, R 17w, sec 16, Hartman & Skaer's Bice 1, c ne, lcn, abn.

RUSH COUNTY—T 17s, R 17w, sec 27, Valerious O. & G. Co.'s Schreveman 1, c nw, spd and sd.

SALINE COUNTY—T 15s, R 2w, sec 17, Mentor O. & G. Co.'s Muir 1, swc, d and a 3501 ft.

SHAWNEE COUNTY—T 12s, R 14e, sec 21, McBride & Goens' Shirley 1, nec sw, dr 2360 ft.

STAFFORD COUNTY—T 21s, R 11w, sec 23, Harper et al's Siffers 1, owd, nwc sw ne, ts 3385-3400 ft, show oil, fsh 3468 ft.

SHERMAN COUNTY—T 7s, R 40w, sec 20, Hannson et al's Murry 1, owd, nec sw nw, sd 2650 ft.

SUMNER COUNTY—T 33s, R 3w, sec 22, Otstot et al's Bartlow 1, sec, sd 1860 ft. T 34s, R 2w, sec 23, Gypsy Oil Co.'s Douglas 1, nec se nw, ts 4493-99 ft, 16 bbl per hr. T 34s, R 3w, sec 4, Jarvis et al's Wernecke 1, sec sw, sd 4205 ft. T 34s, R 4w, sec 11, Jarvis et al's Wycoff 1, swc nw, sd 4216 ft. T 35s, R 1e, sec 9, Otstot et al's Volker 1, nwc ne, rig.

WABUNSEE COUNTY—T 12s, R 11e, sec 19, Empire G. & F. Co.'s Schwalm 1, sec, d and a 3438 ft.

WOODSON COUNTY—T 25s, R 14e, sec 31, Howard et al's Riley 1, nwc sw, lcn, abn.

OKLAHOMA

T 28n, R 3w, Grant County—Sec 6, Otstot Dev. Co.'s Snyders 1, nec, sd 4518 ft.

T 27n, R 21w, Harper County—Sec 24, A. F. Kopison Oil Co.'s Selman 1, nec se, spd and sd.

T 27n, R 15w, Woods County—Sec 20, Sooner State Oil Co. & E. R. Black's Marcum 1, c sw, spd and sd.

T 27n, R 5w, Grant County—Sec 18, J. W. Bailey et al's Custard 1, c se, show oil and gas 4628-34 ft, ts 4835-37 ft, td ¶2, co to deepen.

T 27n, R 2w, Kay County—Sec 23, Boucher et al's Cooper 1, sec, ur 12-in at 1330 ft. Sec 25, Marland Oil Co. & Boucher's Woods 1, nec se, dr 1045 ft.

T 27n, R 1e, Kay County—Sec 8, Mathews et al's Buessing 1, nwc, cellar.

T 26n, R 4w, Grant County—Sec 34, Sooner State Oil Co.'s Royce 1, swc nw, sd 550 ft.

T 26n, R 2w, Kay County—Sec 34, J. H. Markham Jr.'s McGaha 1, swc ne, ts 1750-65 ft, td hfw ur 6-in.

T 26n, R 2e, Kay County—Sec 32, J. A. Vincent & National Union Oil Co.'s McNeal 1, nwc ne, sd 2795 ft.

T 25n, R 22w, Harper County—Sec 14, Hoffer Oil Co.'s Cooper 1, nwc se, sd 4182 ft.

T 25n, R 4w, Grant County—Sec 22, Cowden's Vallner 2, nec se ne sw, fsh bit 5640 ft.

T 25n, R 1w, Kay County—Sec 15, Tonkawa Dev. Co.'s McDaniels 1, sec, sd 4434 ft.

T 25n, R 1e, Kay County—Sec 10, Miller Bros.' Anderson 1, nwc se, hfw 3852-80 ft, dr 4064 ft.

T 21n, R 1w, Noble County—Sec 7, R. L. Corley's Williams 1, sec ne sw, sd 1920 ft.

Oklahoma Panhandle

T 6n, R 2e, Cimarron County—Sec 24, Jake G. Phillips' School Land 1, nwc, dr 4215 ft.

T 5n, R 2e, Cimarron County—Sec 22, Sinclair O. & G. Co.'s School Land 1, nwc, td 4624 ft, cemt off cave.

T 5n, R 6e, Cimarron County—Sec 4, Ramsey Bros.' School Land 1, sec, pb to show 4095-4150 ft, had 35 bbl show.

T 4n, R 1e, Cimarron County—Sec 34, Ramsey Pet. Co.'s School Land 1, c se, d 3110 ft.

T 4n, R 25e, Beaver County—Sec 22, O. H. Bonner et al's Maple 1, se ne, rig.

T 3n, R 15e, Cimarron County—Sec 17, Texas County Gas Co.'s Barbee 1, c ne ne, spd.

T 2n, R 9e, Cimarron County—Sec 2, Fenton, Brookins & Flowers' Smaltz 1, swc ne ne, spd and sd.

T 2n, R 18e, Texas County—Sec 23, Connelly, Trammell & Danner's Graves 1, nec sw sw, sd 315 ft.

T 1n, R 15e, Texas County—Sec 26, Hydraulic Oil Co.'s Hitch 1, nec sd, 600 ft.

T 1n, R 19e, Texas County—Sec 5, Trammell, Connelly & Danner's Taney 1, sec nw, sd 280 ft.

T 1n, R 18e, Texas County—Sec 11, Three Way Oil Co.'s Price 1, sec nw, show gas 2560-2620 ft, water 2990-3006 ft, dr 2258 ft.

T 24n, R 17w, Woodward County—Sec 32, Otstot Dev. Co.'s Simmons 1, sec, sd 1500 ft.

T 24n, R 6w, Garfield County—Sec 9, Pulse & Beamer's White 1, sec nw, sd, water at 4720 ft.

T 24n, R 3w, Garfield County—Sec 14, Sagar Oil Co.'s Garsarch 1, sec, dr 4235 ft. Sec 24, Marland Oil Co.'s Disney 1, c nw sw, dr 4615 ft.

T 22n, R 5w, Garfield County—Sec 3, Ashby & Barr's Swinery 1, nwc, sd 740 ft.

T 21n, R 25w, Ellis County—Sec 9, Okla Northern Oil Co.'s 1, c se nw, sd 300 ft.

T 21n, R 19w, Woodward County—Sec 15, Burgoyne Bros.' 1, swc se ne, dr 360 ft.

T 21n, R 21w, Woodward County—Sec 25, Sharon's Elmore 1, swc, sd 2778 ft.

T 21n, R 4w, Garfield County—Sec 12, Beopple et al's Schriver 1, cel sw sw ne, sd 1850 ft.

T 20n, R 4w, Garfield County—Sec 9, Marland Oil Co.'s Looman 1, nec se, fsh csg 5735 ft. Sec 12, Marland Oil Co.'s Miller 1, swc, sd 4586 ft.

T 18n, R 4w, Logan County—Sec 8, Champlin Ref. Co.'s Musgrove 1, sec sw, cemt 8-in at 4731 ft, td 4754 ft.

T 18n, R 15w, Dewey County—Sec 9, Huckleby & McCoy's Perfect 1, nec, sd 3274 ft.

T 18n, R 4w, Logan County—Sec 6, Davis & Browning's Woods 1, nec se, lcn. Sec 11, Welch, Acton & Brown's Hall 1, nec se, sand 4748-85 ft, flowed 60 bbl, dr 5940 ft.

T 18n, R 3w, Logan County—Sec 33, Haley & Consolidated Drlg. Co.'s Quier 1, sec sw, dr by csg at 3690 ft.

T 17n, R 1e, Logan County—Sec 20, T. B. Slick's Signs 1, nwc sw, sd 5067 ft. Sec 28, T. B. Slick's Berry 1, swc se, hfw 5305-30 ft, dr 5460 ft.

T 16n, R 7w, Kingfisher County—Sec 6, Pet. Eng. Core Drlg. Co.'s Campbell 1, c nw se, rig.

T 16n, R 6w, Kingfisher County—Sec 27, Crawford & McKenna's Sturgeon 1, nec sw, dr 3800 ft.

T 16n, R 5w, Kingfisher County—Sec 26, Gault Brown Oil Co.'s Johnson 1, c nw, hfw 4185-4205 ft, fsh bit 4320 ft.

T 16n, R 1w, Logan County—Sec 28, Blackford O. & G. Co.'s Lair 1, csl n½ se, sd 1675 ft, litigation.

T 15n, R 1w, Logan County—Sec 12, Bu-Vi-Bar's Kirkpatrick 1, c sw, sd 4504 ft.

T 14n, R 6w, Canadian County—Sec 9, A. D. Spears' Piatt 1, sec ne, sd 3223 ft.

T 13n, R 3w, Oklahoma County—Sec 18, Slick & Bailey's Lufkin 1, c ne se, r u s t 3750 ft.

T 12n, R 3w, Oklahoma County—Sec 15, Cromwell et al's Thompson 1, swc ne ne, cemt 6-in 6820 ft, dr plugs.

T 11n, R 7w, Canadian County—Sec 9, Ramsey Bros.' Newman 1, csl ne, dr 4100 ft.

T 10n, R 6w, Canadian County—Sec 1, J. M. V. Bailey's Robinson 1, c ne nw, spd and sd.

T 27n, R 12e, Osage County—Sec 6, Wa-Sha-She Oil Co.'s 1, cnl, s¼ ne, dr 1900 ft.

T 26n, R 8e, Osage County—Sec 13, Stephenson, Henry & Rock 1, swc nw sw, rig.

T 25n, R 6e, Osage County—Sec 4, Kay County Gas Co.'s 1, sec sw, dr 3180 ft.

T 25n, R 7e, Osage County—Sec 8, I. T. I. O. Co.'s 1, sec ne, run 8-in 2640 ft.

T 23n, R 7e, Osage County—Sec 9, Kay County Gas Co.'s 3, swc se se, ur 8-in 2533 ft.

T 23n, R 10e, Osage County—Sec 7, Sheeders O. & G. Co.'s 1, c ne, reaming 6-in 2340 ft.

T 19n, R 1e, Payne County—Sec 33, Gardner Pet. Co. et al's Ham 1, c sw ne, cemt 8-in 4168 ft.

T 18n, R 3e, Payne County—Sec 32, Garber, Pulse & Gloyd's Widows 1, nec se nw, sd 1200 ft.

T 17n, R 3e, Lincoln County—Sec 20, Willis O. & G. Co.'s Gunn 1, nwc se, ts 4636-77 ft water, sd.

T 17n, R 5e, Lincoln County—Sec 27, Flynn & Morgan's Smith 1, sec ne nw, dr 1075 ft.

T 14n, R 7e, Creek County—Sec 11, Lima O. & G. Co.'s Grayson 1, nwc ne ne, sand 3128-3246 ft, hfw, set 8-in at 3252 ft, co. Sec 16, Bu-Vi-Bar's Nero 1, c se ne, cemt 5-in, td 1557 ft, sd.

T 13n, R 4e, Lincoln County—Sec 16, Bu-Vi-Bar's School Land 1, c ne se, sd 4500 ft.

T 17n, R 13e, Tulsa County—Sec 1, E. A. Hawley's Taylor 1, sec ne, spd and sd.

T 15n, R 9e, Creek County—Sec 33, C. G. Tibbens' J. Marshall 1, swc se sw, mach.

T 14n, R 9e, Creek County—Sec 1, L. C. Wheeler & King's Morton 1, sec nw, lcn.

T 14n, R 11e, Okmulgee County—Sec 7, Amerada Pet. Corp. et al's Farmer 1, swc se, dr 2900 ft.

T 13n, R 9e, Okfuskee County—Sec 21, Barnsdall Oil Corp.'s Eelf 1, swc se ne, dr 3755 ft.

T 12n, R 10e, Okfuskee County—Sec 8, Blakely et al's Yarhola 1, swc se nw, sd 3157 ft.

There Are Over 1,000,000 Feet

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A. P. I. Specification
SUCKER RODS

Now in Use

"High Manganese" RODS

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ROTARY AND CABLE TOOLS

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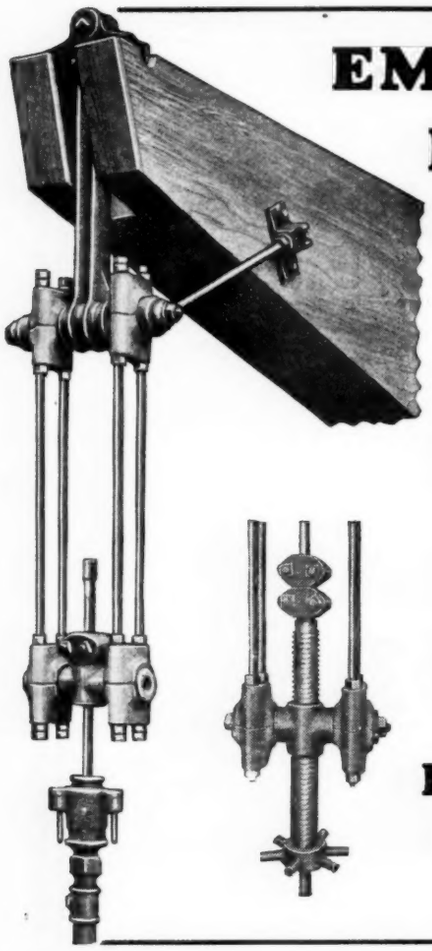

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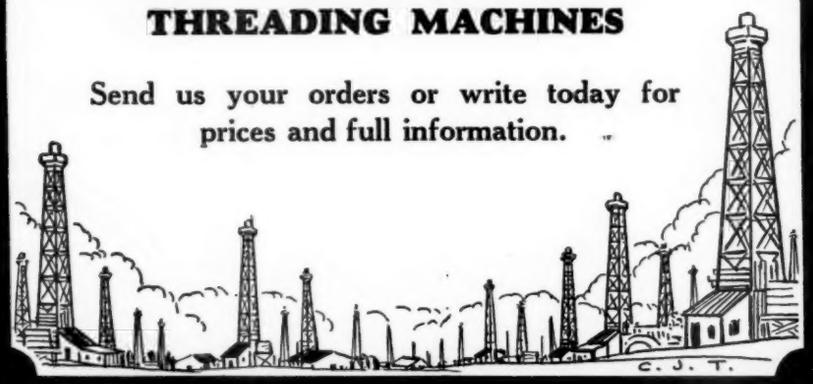


THE LARGEST SUPPLY HOUSE IN THE SOUTHWEST
PEDEN IRON & STEEL CO.
HOUSTON – SANANTONIO – SHREVEPORT

T 11n, R 10e, Okfuskee County—Sec 4, Moose & Daniels' Stidham 1, swc nw, sd 622 ft.

T 18n, R 15e, Wagoner County—Sec 23, Elk Drlg. Co.'s Norfer 1, nec, d and a at 1040 ft.

T 15n, R 18e, Muskogee County—Sec 12, C. F. Finefield's G. Jobe 1, nwc se, sd 1252 ft.

T 13n, R 17e, Muskogee County—Sec 33, L. T. Haynie's Linder 1, c se, dr 1630 ft.

T 11n, R 13e, Okmulgee County—Sec 27, G. N. Buzzard et al's Thompson 1, nwc ne ne, dr 3745 ft.

T 9n, R 16e, Pittsburg County—Sec 32, Pattison et al's McDuff 1, swc nw se, dr 4540 ft, ¶3, Bradenheaded sand at 1890-95 ft.

T 9n, R 18e, Haskell County—Sec 10, Marion Oil Co.'s Sanders 1, nwc ne sw, sd 2250 ft.

T 7n, R 17e, Pittsburg County—Sec 21, Quinton Spelter Co.'s Yoho 1, nec, spd.

T 5n, R 18e, Latimer County—Sec 15, Limestone O. & G. Co.'s Murray 1, dr 1550 ft.

T 11n, R 2e, Pottawatomie County—Sec 32, Wilcox O. & G. Co.'s Pickard 1, sec sw, sd 4500 ft.

T 10n, R 2w, Cleveland County—Sec 22, Cromwell & Franklin's Donavan 1, c sw, sd 4706 ft.

T 10n, R 3e, Pottawatomie County—Sec 12, Sikes, Kilgore & Shaffer's Ives 1, sec se, td 4744 ft, show oil and hfw, ur 5-in.

T 10n, R 4e, Pottawatomie County—Sec 28, Central National Oil Co.'s Toney 1, swc, cemt 8-in csg 3980 ft.

T 10n, R 5e, Pottawatomie County—Sec 16, Clark, Edwards et al's School Land 1, nec sw, dr 4720 ft.

T 8n, R 2e, Pottawatomie County—Sec 24, Superior Oil Corp.'s Jones 1, swc nw ne, 4110 ft, co.

T 8n, R 4e, Pottawatomie County—Sec 1, Amerada Pet. Corp.'s Gravel 1, swc se ne, dr 2870 ft.

T 7n, R 1w, Cleveland County—Sec 15, Sooner Oil Co.'s Vandeveer 1, nec nw sw, cemt 8-in 2994 ft.

T 7n, R 6e, Seminole County—Sec 7, Simon & Beam's Palmer 1, nec nw ne, rig.

T 7n, R 7e, Seminole County—Sec 32, I. T. I. O. Co.'s Marshall 1, nwc sw, fsh 4759 ft.

T 7n, R 8e, Hughes County—Sec 21, Jarvis & Holmes' Street 1, nwc se nw, td 4362 ft hfw, pb to 3090-3126 ft, shot 150 qt, made 145 bbl co.

T 6n, R 2e, Pottawatomie County—Sec 10, Davis, Detrick et al's McGahey 1, sec nw, sd 4988 ft.

T 6n, R 6e, Seminole County—Sec 1, T. B. Slick's Moore 1, swc ne sw, td 2753 ft, 1000 ft fluid, ur 6-in.

T 6n, R 7e, Seminole County—Sec 5, Magnolia's Vierson 1, sec nw, fsh 3315 ft. Sec 36, Gardner et al's Harris 1, nwc se, dr 2588 ft.

T 6n, R 8e, Seminole County—Sec 18, Carter Oil Co.'s Phillips 1, nwc ne nw, owd, fsh 3936 ft. T 5n, R 5e, Seminole County—Sec 13, Shaffer O. & R. Co.'s Isaacs 1, c ne sw, dr 2550 ft.

T 5n, R 6e, Seminole County—Sec 13, T. B. Slick's Barrett 1, nec se nw, set 6-in 3525 ft.

T 5n, R 9e, Hughes County—Sec 17, E. W. Whitney's Ruddlestone 1, sec sw, dr 615 ft. Sec 20, Noble O. & G. Co.'s Wickett 1, sec, dr 485 ft. Sec 31, Winkler & McQueen's Tyger 1, c sw se, sd 2761 ft.

T 10n, R 12w, Caddo County—Sec 28, Magnolia Pet. Co.'s Selby 1, swc, dr 1560 ft.

T 9n, R 22w, Beckham County—Sec 32, O. & H. Pet. Co.'s Barnes 1, nwc ne, owd, sd 3000 ft.

T 9n, R 5w, Grady County—Sec 13, Remington's Fulton 1, swc ne, sd 720 ft.

T 8n, R 23w, Beckham County—Sec 5, Prince Bros. et al's 1, c sw nw, d and a at 3003 ft.

T 6n, R 10w, Caddo County—Sec 22, English Drlg. Co.'s Jacobs 1, nwc se, sd 3540 ft.

T 6n, R 12w, Caddo County—Sec 29, W. J. Hartley's Gilbreath 1, sec nw se, owd, sd 3394 ft.

T 5n, R 7w, Grady County—Sec 7, Nicholos & Page's Drake 1, cel se, sd 1900 ft.

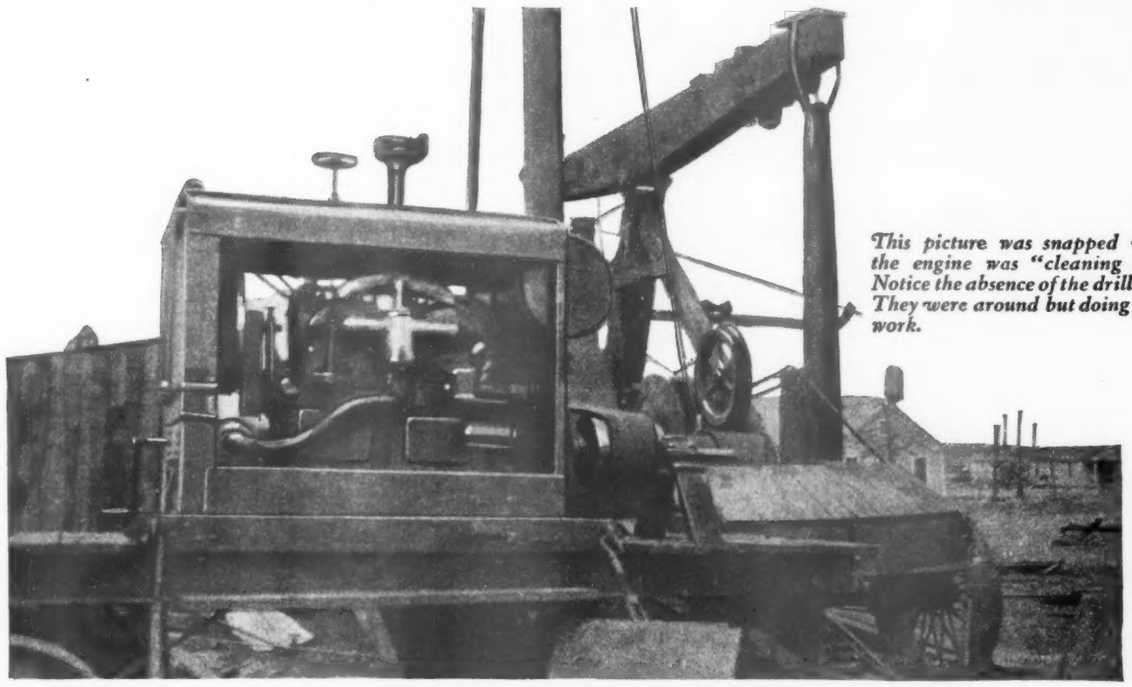
T 3n, R 10w, Comanche County—Sec 24, Jolly & Ogg's Sparlin 1, sec ne, dr 996 ft.

T 2n, R 10w, Comanche County—Sec 10, Danciger's Skitler 1, nec se, owd, show gas 2192-2202 ft, d and a 2203 ft.

T 2s, R 16w, Kiowa County—Sec 6, Landfair 1, sec sw se, sd 2303 ft.

T 5n, R 4e, Pontotoc County—Sec 12, Gillespie

Magnolia Replaces Steam with Climax High-Speed Drilling Unit



This picture was snapped while the engine was "cleaning out." Notice the absence of the drill crew. They were around but doing other work.

ALONGSIDE the Bankhead highway at Olden, Texas, you'll find a Climax High-Speed "Paymaster Junior" Drilling Unit. The Magnolia Petroleum Company is using this unit to replace steam power. With the result that there is no more waiting for steam—no boiler troubles—and no costly delays in getting the hole down. Drilling is speeded up all the way along. If this drill rig isn't within driving range, write us. We'll send you the location of one that is.

CLIMAX ENGINEERING COMPANY
75 West 18th Avenue Clinton, Iowa

Recently Shaw & Lamb, contractors of Brownwood, Texas, spudded in with a Climax High-Speed "Paymaster Junior" in 4 days, at Lease No. 2 Gwathmey in Brown County. That was 6 days quicker than is normally possible with either steam or oil-engine power.

CLIMAX Trade Mark Reg. U. S. Pat. Off.

High-Speed Drilling Units

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THE NATIONAL SUPPLY COMPANIES

Say you saw it in The OIL WEEKLY

et al's Fleming 1, swc se, sand 2545-2565 ft, swab 25 bbl and sd.

T 4n, R 3e, Garvin County—Sec 10, Garland Oil Co.'s Strickland 1, swc nw sw, sd 2650 ft.

T 4n, R 4e, Pontotoc County—Sec 10, Marland Oil Co.'s Lawrence 1, c sw se, dr 1305 ft.

T 4n, R 6e, Pontotoc County—Sec 13, American O. & R. Co.'s Wright 1, nwc ne ne, sd 1970 ft. Sec 35, Bowles et al's Rayborn 1, swc se, sd 1320 ft.

T 4n, R 7e, Pontotoc County—Sec 8, J. C. Crosby & Hicks' Nowbaby 1, sec ne sw, rur.

T 3n, R 1e, Garvin County—Sec 12, Magnolia's Vaughn 1, nwc sw nw, cemt 5-in 4657 ft.

T 1n, R 2e, Murray County—Sec 17, Revels & McGee's M. Wolfe 1, swc, dr 240 ft.

T 1n, R 8e, Coal County—Sec 35, W. E. McGraw et al's Patton 1, swc se ne, sd 935 ft.

T 4s, R 2w, Carter County—Sec 13, Roxana's Sarasota 1, sec, hfw 2260-61 ft, dr 2735 ft.

T 5s, R 4e, Marshall County—Sec 11, Bilbo's Chapman 1, nec nw ne, sd 380 ft.

TEXAS

TEXAS GULF COAST

Company, Well and Location	Initial Production Bbls.	Depth
COLORADO COUNTY—		
Waldvogel et al, Tanner 1, 3 mi s Glidden	*	250
T. E. Waldrup, Vail 1	*	1465
FORT BEND COUNTY—		
Sun Oil Co., H. R. Farmer 4, Boling	*	675
Kaspareck 1, Boling	*	2565
Southern Explo. Co., Mullins 1, Boling	*	3950
Gulf, Beard 2-A, Long Point	*	4250
Trone 6, Long Point	*	....

AUSTIN COUNTY—Humble's Gotosky 2, Raccoon Bend, flowing 150 bbl; Wilson 1, Raccoon Bend, dr 2024 ft shale; Grawunder 1, Raccoon Bend, setting up. Alexander & Lyles' Goebel 1, Raccoon Bend, sdtrk 2585 ft. L. H. Weadock's Ward 1, dr 945 ft sand.

BRAZORIA COUNTY—Roxana's Allen Bernard 1, Allen Dome, pumping 30 bbl; Allen 4, Allen Dome, producing 30 bbl bailing; Randon 1, Allen Dome, removing stuck dr pipe; Bell 2, Clemens Dome, dr 5878 ft shale and lime. Gulf's Perry 3, Stratton Ridge, dr. Stanfield & Myers' McNeil 1, Hinckle Ferry, dr 770 ft.

CHAMBERS COUNTY—Pure's Lost River 1, Lost Lake Dome, dr 3575 ft; Old River 1, Lost Lake Dome, drk; Trinity River 1, Lost Lake Dome, drk; Little Lost Lake 1, Lost Lake Dome, drk; Lost River Lake 1, Lost Lake Dome, drk; Cut-Off Baycu 1, Lost Lake Dome, lcn. R. L. Bartlett's Fisher 1, Barbers Hill, dr 2160 ft.

COLORADO COUNTY—Rich Oil Corp.'s Von Rosenberg 1, 2½ mi ne of Columbus, standing 1066 ft hard rock. Johnson Bros.' Breeding 1, ne of Sheridan, tested at 1843 ft, no show. T. E. Waldrop's Vail 1, abn 1465 ft. Carl Milentz's Auerbach 1, near Glidden, sd 580 ft. Waldvogel et al's Tanner 1, 3 mi s Glidden, abn 250 ft; Tanner 2, lcn.

FORT BEND COUNTY—Sun Oil Co.'s Kasparek 1, Boling, abn 2565 ft; Kasparek 2, dr 1190 ft; J. R. Farmer 5, Boling, dr 3210 ft shale; J. R. Farmer 6, Boling, dr 820 ft; J. R. Farmer 7, Boling, dr 690 ft; H. R. Farmer 4, Boling, abn 675 ft; H. R. Farmer 5, Boling, dr 650 ft; H. R. Farmer 6, Boling, drk; H. R. Farmer 7, Boling, dr 1160 ft; E. C. Farmer 1, Boling, standing. Southern Explo. Co.'s Mullins 1, Boling, abn in anhydrite 3950 ft. Gulf's Beard 2-A, Long Point, abn; Wolf 7, Long Point, dr; Trone 6, Long Point, abn; J. M. Moore 15, Moore's Field, dr 1360 ft. Humble's Sugar Land Industries 1, Sugar Land, dr 2705 ft shale.

HARRIS COUNTY—Dr. P. S. Griffith's Fee 1, 8 mi nw Houston, dr 200 ft. Juanita Oil Co.'s Kitsman 1, 3 mi n of Cypress, dr blue shale and packed sand, oil formation. Hunt et al's Lobit 1, 4 mi n Goose Creek, dr 880 ft. Humble-Marland's Warren 2, Hockley, dr 4246 ft pyrites. Humble's Tex-Ex-Warren 1, Hockley, dr 400 ft cap rock.

JEFFERSON COUNTY—Deep Test Oil Co.'s McFaddin 1, 4 mi ne of Spindle Top, sd 2175 ft. Gulf's Bordages 4, Fannette, dr 4890 ft. Southern Spindle Top O. & Dev. Co.'s Young 1, 1 mi w Nederland, sd 3350 ft. Jim McMurry's Crosby 2, 5 mi ne Port Arthur, dr 2730 ft gbo. Port Arthur O. & Dev. Co.'s West 4, Westbury, sd 3500 ft. Hinds Oil Co.'s Parker 3, ne side of Spindle Top, dr 2860 ft shale. Traders Oil Co.'s Cissell 1, dr 2900 ft gbo.

LIBERTY COUNTY—Harrison Oil Co.'s Quintette 2, N. Dayton, temp abn. The Texas Co.'s Havard 1, Davis Hill, dr 4935 ft shale; Green 1, S. Liberty, dr 2300 ft sand; Staiti 8, S. Liberty, dr 616 ft gbo. Yount-Lee Oil Co.'s Mitchell 2, dr 3800 ft gbo. Sun Oil Co.'s Mitchell 1, dr 3250 ft shale and sand. Barlow et al's Minchcliff 1, 2½ mi ne Cleveland, sd 2215 ft.

MATAGORDA COUNTY—Gulf's Sanborn 4, Hawkinsville, abn; Sanborn 5, Hawkinsville, dr 985 ft. Matagorda County Dev. Co.'s Hawkins 1, Bay City, sd 1985 ft.

WHARTON COUNTY—Rich Oil Corp.'s Lee-Clipson 1, ½ mi sw Lissie, dr 1408 ft gbo.

SOUTH LOUISIANA

Company, Well and Location	Initial Production Bbls.	Depth
CAMERON PARISH—		
Pure Oil Co., Sweet Lake 4	2000	5924
Calcasieu Oil Co., Magnolia Pet. Co. & Union Sulphur Co., Watkins 1	2500	3958
IBERIA PARISH—		
Gulf, Brussard 1, Loreauville	*	5010
State Z-3, Loreauville	*	1400
JEFF DAVIS PARISH—		
John Carrodine et al, Walsh 1, Welsh	15	1355

ASCENSION PARISH—Gulf's United Lands Co. 5, Sorrento Dome, dr.

CALCASIEU PARISH—Union Sulphur Co.'s Fee 722, Sulphur Dome, dr 1330 ft; Fee 723, lcn; Fee 724, drk. Newton Drilling Co.'s Dupre 1, Lake Charles, dr 3500 ft.

CAMERON PARISH—Pure's Sweet Lake 2, Sweet Lake, waiting on orders; Sweet Lake 3, Sweet Lake, cleaning out; Sweet Lake 4, Sweet Lake, completed for 2000 bbl; Sweet Lake 5, Sweet Lake, making 600 bbl a day and ¶4½. La. Land & Explo. Co.'s Calcasieu Lake A-1, dr 2640 ft; Calcasieu Lake A-2, lcn. Calcasieu Oil Co.'s Watkins 1, Kelso Bayou, completed for 2500 bbl through ½-in choke; Watkins 2, Kelso Bayou, dr 2872 ft hard sand and lime; Doiron 1, Kelso Bayou, dr 3398 ft sand. Noble et al's Ellender 1, Hackberry, fsh 4335 ft. Yount-Lee Oil Co.'s School Lands 7, Hackberry, dr 4580 ft shale; State Land 6, Hackberry, ru; State Lands 7, Hackberry, dr 1610 ft; Satte Land 8, Hackberry, lcn.

IBERIA PARISH—La. Land & Explo. Co.'s Avery 1, Avery Island, dr 3400 ft. Gulf's Brussard 1, Loreauville, abn 5010 ft; State Z-3, Loreauville, abn 1400 ft; State Z-4, Loreauville, lcn. Jefferson O. & Dev. Co.'s Jeff Island Salt Co. 2, dr 3240 ft gbo.

IBERVILLE PARISH—Roxana's Wilbert 1, White Castle Dome, coring at 1745 ft shale and oil sand. Union Sulphur Co.'s Wilbert 1, Bayou de Glaise Dome, dr 2600 ft gbo; Schwing 1, Baycu Blue Dome, dr 2790 ft shale and lime.

JEFF DAVIS PARISH—Estropal Oil Co.'s Le Doux 2, sd rock 2980 ft. Jno. Carrodine et al's Walsh 1, Welsh, pumping 15 bbl oil net. Eunice Welsh Oil Co.'s Walshe 2, dr 400 ft.

LA FOURCHE PARISH—Gulf's Mrs. Stark et al 2, Thibodaux, dr.

ST. MARTIN'S PARISH—Rycade's Atchafalaya 1, fsh; Atchafalaya 2, dr 2300 ft.

ST. MARY PARISH—Jacob Dannenbaum's Viguerie 1, Grand Lake, lcn.

TERREBONNE PARISH—Southern Gas Co.'s South Down 4, td 1385 ft.

SOUTHWEST TEXAS

HIDALGO COUNTY—
Queen City O. & G. Co., American Land & Irrig. Co. 1, n Mercedes | * | 3235

CALDWELL COUNTY—Dr. Bute's Boyd 1, sd 2375 ft. Radcliff et al's Briscoe 1, ne Luling, standing. Hertz & Hinton's Parr 1, dr 1415 ft. Joe Bruner et al's Wilson 1, set csg at 40 ft. United North and South's Tiller 2, dr 7071 ft; Kelly 1, dr 7498 ft.

DUVAL COUNTY—Humble's Walsh 7, tested salt water 4508 ft. R. Driscoll's Fee 9, sec 23, tested sw at 2955 ft; Fee 10, sec 448, tested ¶25 2480 ft. National Oil Co.'s Ball 1, standing 1057 ft. Milo E. Trussell Tr.'s Moody 1, ne sec 60, td 2508 ft.

HIDALGO COUNTY—Queen City O. & G. Co.'s American Land & Irrig. Co. 1, n Mercedes, junked at 3235 ft. Dale Smith's Daskan 1, td 3235 ft.

JIM HOGG COUNTY—Miller Shaw's Jones 1, sec 381, dr 1865 ft. Hale et al's Jones 1, td 2550 ft. St. Alban's Edwards 9, standing at 2144 ft.

SAN PATRICIO COUNTY—Pardee Pet. Co.'s Bell 1, 4 mi s Mathis, sd 2850 ft. Leach

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PROVIDENCE, R. I.

The Fairbanks Company
Distributors

et al's Collins 2, nw Mathis, 2375 ft, will test gas sand.

VAL VERDE COUNTY—East Del Rio's Weatherbee 1, sd 3200 ft. Owens et al's Mills 1, making small amt gas from 4215 ft. Thraves et al's Wilson 1, dr 910 ft.

WEBB COUNTY—J. H. Winch's Gates 1, sec 70, td 1900 ft.

WEST TEXAS

Completions

ANDREWS COUNTY—		
C. B. McKennon, et al, Means 1....	*	3375
TOM GREEN COUNTY—		
Marland Oil Co., Johnson 1	*	3461
JONES COUNTY—		
Stough et al, Bennett 1	†	800
LOVING COUNTY—		
Owen-Sloan Oil Co., Johnson 1	*	3700
UPTON COUNTY—		
Southern Crude, Hobbs 1	*	3249

ANDREWS COUNTY — Deep Rock Oil Co.'s Harris 1, elev 3173 ft, top salt 1705 ft, sd 2860 ft.

BORDEN COUNTY—Dixon Creek Oil Co.'s Clayton-Johnson 1, cmt cellar 372 ft. Marland Oil Co.'s McDavid 1, top lime 2410 ft, dr 2720 ft; Murphy 1, lcn.

BREWSTER COUNTY—Cole & Cowden's Jackson-Harmon 1, sp and sd. J. M. Hickey et al's Jackson-Harmon 1, spd and sd. J. M. Hickey et al's JJackson-Harmon 1, sd 926 ft. Van McPhail et al's McIntyre 1, dr 1660 ft. Mid-Kansas O&G Co.'s Turney 1, set cas 2780 ft. Reese & White's Kimball 1, co 1390 ft. Wilcox & Anderson's Gage 1, sd 1855 ft.

COKE COUNTY—W. H. Brown et al's Foster 1, co 3180 ft. Lipan Oil Co.'s Conner 1, sd 3375 ft; Rawlings 1, sd 2736 ft.

CONCHO COUNTY—The Exploration Co.'s Hartgrove 1-A, sd 940 ft. Sartain Oil Co.'s Evridge 1, lcn.

CRANE COUNTY — Crane County Dev. Co.'s Mosley-Brookfield 1, elev 2325 ft, top salt 819 ft, top lime 2072 ft, dr 2500 ft. Gulf Prod. Co.'s Waddell 3, elev 2724 ft, top lime 3055 ft, dr gray lime 3280 ft.

CROCKETT COUNTY — J. S. Cosden & Co.'s Paul Perner 1, ur 805 ft. Dixie Oil Co.'s Thompson 1, lcn. W. W. Donnelly et al's Massie 1-A, sd 520 ft; Shannon 1, sd making gas 1664-80 ft; Shannon 2, rig. Todd 1, materials. Henshaw & McMan O&G Co.'s W. Owens 1, lcn. Humble O&R Co.'s Sorg 2, top salt 995 ft, dr 2355 ft. M. B. Wyrick et al's Halff 1, sd 330 ft. Osage Oil Corp. & T. T. Word's Halff 2, sd 970 ft; Halff 3, dr 360 ft. World Oil Co.'s Schneeman 1-B, sd hfw 2865 ft.

CULBERSON COUNTY — Deep Rock Oil Co.'s T&P Fee 2, sd 1210 ft; Seay 1, sd 1270 ft. Dittman Drlg. Co.'s Miller 1, sd in sulphur water 1767 ft. J. M. Hickey et al's Finley 1, co 650 ft. Jas. Gardner et al's Radford 1, sd 635 ft.

JEFF DAVIS COUNTY — Humble O&R Co.'s C. Flores 1-A, elev 4239 ft, cmt cas 3920 ft. E. L. Smith Oil Co.'s Means 2, sd 2565 ft.

ECTOR COUNTY—Shoup et al's Davis 2, materials.

EL PASO COUNTY — Ellsworth et al's McKinney-Jones 1, rig.

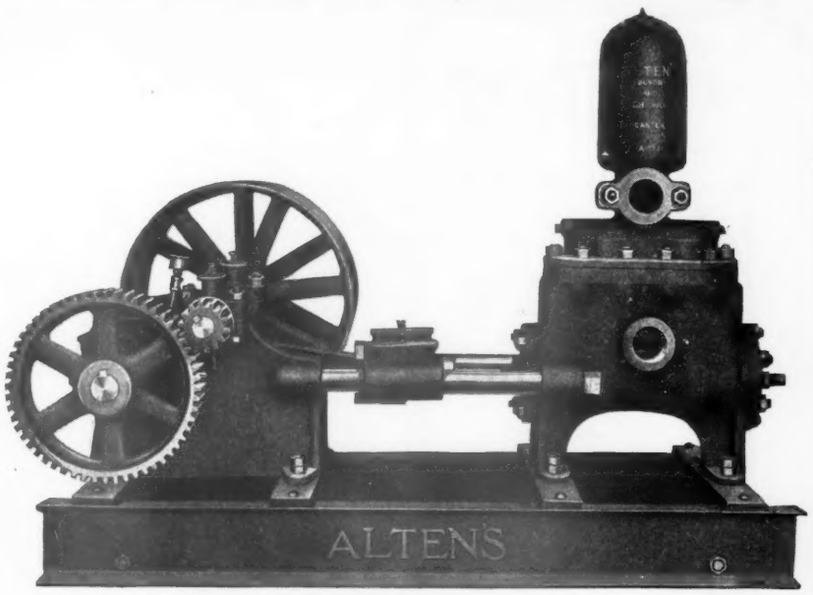
FISHER COUNTY — Cranfill-Reynolds & Sun Oil Co.'s Young 1, set cas 2880 ft. Rainey et al's Marberry 2, co 2745 ft. Sinclair O&G Co.'s Steele 1, materials.

GARZA COUNTY—Emerald Oil Co.'s J. M. Boren 2, top salt 660 ft, sd 1400 ft. Gulf Prod. Co.'s Swenson 1-A, elev 2492 ft, top salt 495 ft, top lime 2075 ft, dr lime 4510 ft. Marland Oil Co.'s Pippen 1, rig.

GLASSCOCK COUNTY—Marland & Texon's Settles 1, elev 2646 ft, top lime 2035 ft, fsh 3206 ft. R. R. Penn's Hughes-Johnson 1, lcn. Merriwether Oil Co.'s McDowell 2, rig.

TOM GREEN COUNTY—Fitzgerald et al's Bennett 1, water trouble 1920 ft. R. O. Haubelt et al's Johnson 1, sd 1205 ft. Lone Eagle Oil Co.'s Shap 1, lcn. Marland Oil Co.'s Johnson 1-A, set cas 3173 ft. World Oil Co.'s Pulliam 2, elev 1923 ft, set cas 655 ft.

HOWARD COUNTY—Bristow & Merrick's Hooks 5, rig; Roberts 1, cmt cas 1602 ft. Coyle-Concord Oil Co.'s Roberts 4, dr 1570 ft. F-H-E Oil Co.'s Roberts 2-B, set cas 1800 ft; Roberts 1-C, sd 1960 ft; Roberts 1-E, rig. W. W. Donnelly et al's Clay 1, lcn. Gulf Prod.



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A HIGH PRESSURE PUMP with interchangeable pistons and cylinder liners that permit you an almost unlimited range of capacity and volume. Constructed of high grade materials and mounted on a base of channel steel with tight and loose pulley for any power you wish to use. A pump that is correctly designed and tested by years of satisfactory service in fields all over the world.

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Co.'s Chalk 4, co after shot 1780 ft. Godley O&G Co.'s Hooks 2, fsh 1875 ft. Greene O&R Co.'s Clay 1, rig. Henshaw & Co.'s Settles 1, co 1900 ft. Lockhart & Co.'s Roberts 1, top lime 2064 ft, swab 100 bbls oil per hour 2980-3019 ft. Magnolia Pet. Co.'s Mary-Chalk 10, dr 605 ft; Kelly-Chalk 10, dr 930 ft; Harry Hyman 1, dr 755 ft; Roberts 2, elev 2737 ft, top lime 2033 ft, cmt cas 2951 ft; Roberts 3, dr 850 ft; Roberts 4, rig; Roberts 5, dr 2050 ft; Roberts 7, rig; Roberts-Magnolia 1, dr 985 ft. Marland Oil Co.'s Richardson 1, dr 3500 ft. Mays & Nixon's Flowers 1, dr 1570 ft. Merrick & Lambs Clay 3, co after shot in pay 1881-86 ft, td 1900 ft. J. R. McCaldin et al's Roberts 1, dr 1900 ft. Owen-Sloan Oil Co.'s Roberts 3, dr 1325 ft; Roberts 4, lcn. Sprague Oil Co.'s Roberts 1, spd and sd. Sun Oil Co.'s Settles 1, cmt cas 2390 ft. Tate-Weekly & Tubbs' Roberts 3, dr 1450 ft; Roberts 4, lcn. Vitek Oil Co.'s Clay 2, dr 1605 ft. Bert Weekly et al's Roberts 1, fsh 1465 ft.

HUDSPETH COUNTY — American Land Co.'s Lockhart-Roseborough 1, sd 180 ft. Western States Oil Co.'s Gardner-Moseley 1, dr shale 1020 ft; S. W. Moore 1, dr 1250 ft.

IRION COUNTY—P. E. Hill et al's Horney 1, dr 940 ft. F. E. Webb et al's Nutt 1, spd and sd.

JONES COUNTY—R. F. Garland & Co.'s Glynn 1, fsh 2430 ft. Shaheen-Hutson & Weaver's Smith 1-A, elev 1824 ft, swab 30 bbls oil daily 2498-2504 ft. Phillips Pet. Co.'s Winters 5, rig. Rhodes & Higher's Howell 1, rig. J. N. Sloan et al's Bennett 1, spd and sd. W. G. Stough et al's Willis 1, sd 1740 ft.

KENT COUNTY—Marland & Texon's Bilby 1, dr 445 ft.

KING COUNTY — Humble O&R Co.'s Pitchfork 1, dr 3635 ft.

LOVING COUNTY — Deleware Oil Co.'s Lockhart-Ramsey 1, sd 650 ft. Lockhart et al's Fee 1, top salt 708 ft, sd 2260 ft. Owen-Sloan Oil Co.'s Johnson 1, sd hfw 370 ft.

MIDLAND COUNTY — Gholson et al's Moreland 1, dr 1215 ft. Shoup et al's Parks 1, rig.

MITCHELL COUNTY—Boehn Drlg. Co.'s Hyman 1, sd 505 ft. Paul Teas et al's Mills 1, elev 2187 ft, top lime 1298 ft, co after shot 1766 ft.

PECOS COUNTY—Benedum-Trees et al's Corder 1, cellar dug. Buell-Hagan's Pryor 1, lcn. Day Bros. et al's Yates 1, sd in sulphur water 1217 ft. Bob Elmore et al's M. Holmes 1, elev 2190 ft, top salt 435 ft, sd 990 ft. Everett et al's Fields 1, spd and sd. Gibson Oil Corp.'s Russell 1, elev 3509 ft, dr 1505 ft. Henshaw et al's Corder 1, elev 2980 ft, top salt 1130 ft, sd 2517 ft. Kershaw & Livingston's Cannon 1, sd 1265 ft. Kirby Pet. Co.'s Tippett 1, lcn. McDonald et al's Parsell 1, rig. Michaelson & Tabot's Pecos River Bed 1, spd and sd. Mid-Kansas O&G Co.'s Pryor 1, rig. Miller & McNees' Tyrell 1, cellar dug. Moody Corp.'s Corder 1, elev 2996 ft, top salt 1120 ft, fsh 2960 ft. Oregon Oil Corp.'s Yates 1, salt at 601-720 ft, sd 850 ft. Phillips Pet. Co.'s Smith-Monroe 1, elev 2450 ft, top lime 1221 ft, flowing oil by heads 1227-1350 ft. Skelly Oil Co.'s Tippett 1, cellar dug. B. J. Spikes et al's Brown 1, sd 625 ft. Stidham & Thrasher's Belgrade 1, top lime 1280 ft, sd in sulphur water 1305-15 ft. Transcontinental's Blackstone-Slaughter 1, elev 3539 ft, dr 4945 ft; University 1, ps. Vacuum Oil Co.'s Elsinore 1, dr 580 ft. World Oil Co.'s M. Cerf 1, elev 3435 ft, dr 890 ft; Kloh 1, elev 2810 ft, set cas 440 ft.

REAGAN COUNTY—The California Co.'s University 4, rig. Hagan & Emch's Loftin 1, fsh 470 ft. Marland Oil Co.'s University 1, rig. Moody Corp.'s Walters 1, rig. Roxana's Sawyer 1, rig. The Texas Co.'s Sugg 3, sp. Texon O&L Co.'s University 1-B, Group 1, dr 7580 ft. J. T. White et al's Schafner-Sterling 1, top salt 1275 ft, ur 2250 ft.

REEVES COUNTY—The Exploration Co.'s Kinney 1, cmt cas 1655 ft. D. R. Thompson et al's Eddins 1, co 5130 ft. Grisham-Hunter Corp.'s Rathage-Conner 1, sd 878 ft. Vacuum Oil Co.'s Grisham-Hunter 1, dr 1015 ft. World Oil Co.'s B. T. Biggs 1-B, elev 3068 ft, sd 2288 ft.

RUNNELS COUNTY—Empire Gas & Fuel Co.'s Gray 1, co 2448 ft. Gibson-Johnson's Harris 1, lcn; Serratt 1, set cas 1400 ft. Globe Pet. Co.'s Webb 1, dr 1230 ft. Griswold et al's Boyer 1, sd 635 ft. Jones Oil Synd.'s Hale 1, fsh 1905 ft. Kenwood Oil Co.'s Talley 1, sd 1720 ft. McLean et al's Taylor 1, sd hfw

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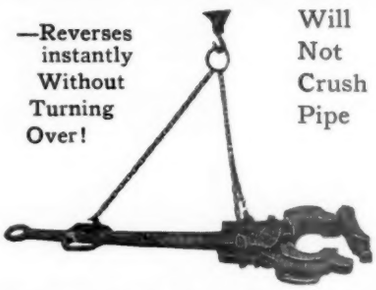

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1050 ft. Henry B. May et al's Schnieder 1, elev 1666 ft, dr 1325 ft. Marland Oil Co.'s Russell 1, lcn. Marland & E. L. Smith Oil Co.'s Herring 1, lcn. Miles Oil Co.'s Lawhon 1, sd 2310 ft. Royal Pet. Co.'s Willingham 1, sd 1410 ft. R. B. Summers et al's Reese 1, rig. Swensondale Oil Co.'s Werner 1, elev 1803 ft, sd 2080 ft. Vacuum Oil Co. & Hill-Ladd's McMillan 2, testing oil pay 2514-16 ft. Robt. Watchorn et al's King 1, elev 1660 ft, dr hfw 2685 ft.

SUTTON COUNTY—National Potash Co.'s Ross 1, dr 995 ft.

TAYLOR COUNTY — A. J. Brown Prod. Co.'s Henslee 1-A, elev 2010 ft, dr 2825 ft. Gilbert Johnson et al's Brown 1, dr 2365 ft. Owen-Sloan Oil Co.'s Latimer 1, sd 2825 ft.

TERRELL COUNTY—Big Bend Oil Co.'s Bassett 1, lcn. Champlin Ref. Co.'s Carter 1, dr 1055 ft. Deep Rock Oil Co.'s Noelke 1, ur 720 ft. Humble O&R Co.'s University 1, crooked hole 895 ft. Milham Corp.'s Bassett 1, cas collapsed 2409 ft. Miller Bros. et al's Allison-Murke 1, rig. Wooley-Jones et al's Parkenham 1, rig.

TERRY COUNTY—King Pet. Co.'s Brownfield 1, dr 3300 ft.

UPTON COUNTY—Curtis-Hults et al's Giddings 2, sd 975 ft. The Texas Co.'s Cordova 1, sd 3201 ft.

VAL VERDE COUNTY — Magnolia Pet. Co.'s Whitehead 1, dr 6165 ft. O. O. Owens et al's Mills 1, sd 4210 ft. W. B. Thraves et al's Wilson 1, sd 905 ft.

WARD COUNTY — E. H. Devore et al's Black 1, spd and sd. Al del Cambre et al's Monroe 1, spd and sd. Selby O&G Co. et al's Dooley-Rogers 1, sd 500 ft.

WINKLER COUNTY — Amerada Pet. Corp.'s Walton 1, elev 2833 ft, making gas, dr 2430 ft. Arizona Mining & Eng. Co.'s Hendrick 1, dr 515 ft. Atlantic Oil Prod. Co. & J. D. Collett's Hendrick 1-F, elev 2884 ft, top lime 2436 ft, trying to kill gas 2735 ft. Cranfill & Reynolds, Inc.'s Hendrick 1-C, trying to kill gas 2730 ft. Gibson-Johnson et al's Leck-Daugherty 1, elev 2883 ft, dr 1135 ft. Independent O&G Co.'s Cowden-McCabe 1, cmt cas 2285 ft. Roxana & Llano Oil Co.'s Scarborough 2, 2932 ft, top salt 1120 ft, set 8¼-in cas 1577 ft. Sheldon & Burden's Hendrick 1, elev 2806 ft, top lime 2610 ft, sd 3243 ft. Southern Crude & Westbrook's E. G. Hutchings 1-T-90 (sec 47), trying to kill gas 2484 ft. White Eagle O&R Co.'s Leck-Collins 1, co 3260 ft.

Favorable Show in Lost Soldier Deep Test

Casper, Wyo.—Considerable excitement has been caused here recently by what seems to be an authentic strike in the Producers & Refiner's Corporation's deep test in the Ferris field, Little Lost Soldier field district, Carbon County, Wyoming. The production is coming from a sand which is in dispute; some authorities say it is the Embar while others maintain that it is the Amsden .Total depth is 4520 feet. Reports from officials of the company concerning the size of the well also vary widely; Prairie Oil & Gas Company officials state that the production is between 700 and 800 barrels per day. Producers & Refiners report a much smaller production.

In any case, the strike is an important one. Other tests have been drilled to around 6000 feet in the Ferris region, and have not gotten commercial production, this is the first well to be commercial. Total depth is 4525 feet.

Because of the bad weather it has been impossible to make a test of the production and until the conditions improve the exact amount of the quantity discovered will not be known. Location is in Section 25-26-87.

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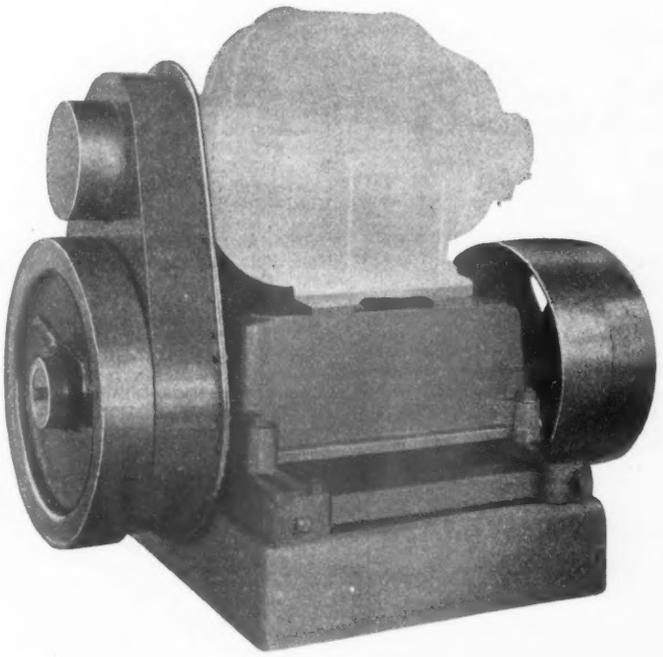
Reduction Units



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COFFEYVILLE, KANSAS

PERMITS

(Continued from 56)

EAST TEXAS

Company, Well and Location	Initial Production Bbls.	Depth
ANDERSON COUNTY—		
Humble, Lizzie Smith 1, D. Roberts sur	83	3732
HARRISON COUNTY—		
D. M. Lide et al, Abercrombie 1, R. W. Bedford sur	¶3½	1898
PANOLA COUNTY—		
Texas Co., Adams B-7, I. Hatcher sur	¶4	1003

NORTH TEXAS

ARCHER COUNTY—		
Bridwell Oil Co., Burns 1	25	1513
F. C. Grebin, et al, Waggoner 1	*	1910
F. H. Gholke, et al, Parrish 1	40	1554
Gulf Prod. Co., E. S. Tabor 1	*	1511
E. J. Netherton 1	*	1605
Holcomb & Jones, et al, K. & K. 2	15	774
H. M. Kelleher, et al, Andrews 1	*	1528
United Producers Co., Perkins 3	15	1035
Wilson, et al, Carr 1	*	1360
BURKBURNETT—		
Magnolia Pet. Co., Hugh Heilly 137	*	2100
COOKE COUNTY—		
Hoffer Oil Corp., Wilson 1	*	2100
Vacuum Oil Co., Beckleman 1	*	3960
ELECTRA—		
J. C. Jennings, et al, T. L. Burnett 1	40	1524
Perkins & Cullum, Beaver Electra Fee 1-A	20	1616
HASKELL COUNTY—		
S. S. Kouri, et al, Reynolds 1	*	2005
JACK COUNTY—		
Amerada Pet. Corp., G. L. Fry 1	*	735
G. L. Fry 2	*	800
J. E. Shaw 1	*	620
J. E. Shaw 2	*	470
W. H. Kerbow, et al, Gowdy 1	*	650
Measure & Fondren, Massie 1	*	507
Seaboard O&G Co., et al, Cullers 3	40	2025
Shaw & Rathke, Cullers 7	50	2013
K-M-A AND IOWA PARK—		
Chester Everts, et al, Cooper 1	†	1688
L. P. Hammond, et al, Ferguson 3	*	490
Henry Hobbs, et al, Hodge 1	*	1855
MONTAGUE COUNTY—		
Benton-Woods, et al, McCall 1	*	2327
Carter & Rycade Oil Corp., Cunningham 5	50	929
Sigler & McGinley, Loy 1	*	1210
WILBARGER COUNTY—		
Consolidated Oil Co., et al, Waggoner 1	*	2404
Golding-Cochran, et al, Waggoner 1-B	*	2782
Milham Corp., Waggoner 3-C	*	2223
Phillips Pet. Co., Waggoner 12-NN	10	2595
Waggoner Ref. Co., Waggoner 2-E	20	2355
YOUNG COUNTY—		
Allday Oil Corp., Johnson 1	35	585
Benson Oil Co., Benson 1	*	1006
Nash & Windfohr, Hinson 3	10	2219
Parker, et al, Newman 2	*	650
Wolf, et al, Lowe 1	10	857

CENTRAL WEST TEXAS

BROWN COUNTY—		
Central Texas Ref. Co., Allcorn 2	85	1148
Clark-Buffalo Oil Co., Brown County Fee 1	240	1102
Gilman & McMurray, Baugh 1	*	1975
Miller, et al, Allcorn 1	15	1150
Nat. G&F Co., Capps 2	¶¼	1614
Pandem Oil Corp., Curry 3-B	¶1½ & 20	1112
Hutton 2	70	1128
Mel Richards, et al, Curry 2	30	1110
Richardson, et al, Mears 1	*	1380
Ryan, et al, Fuller 1	*	1110
Shuler & Davis, Boysen 1	*	1275
Syndicate Oil Co., Curry 2	30	1125
Taylor, et al, Lewis 1	*	1173
Texas Fidelity Oil Corp., Kennedy 1	*	3055
COLEMAN—		
Gwinnup & Bradstreet, Morris 1	50	2000
Roth & Faurot, Sealy-Smith 2	190	1070
Roxana Pet. Corp., Gray 1	*	500
EASTLAND COUNTY—		
Belva Oil Co., Good 3	1200	3724
Charter Oil Co., Roper 1	¶1	1387
Moody Corp., et al, Dyer 2	¶6	3889
West Adams Pet. Corp., Ramsower 3	*	3789
SHACKELFORD COUNTY—		
Hope Pet. Co., Reynolds 1 (sec 26)	¶4	1310
Texas Cons. Oil Co., Isbell 5	5	725
STEPHENS COUNTY—		
Lyda, et al, Andrews 1	*	502

TEXAS PANHANDLE

GRAY COUNTY—		
Delaney Oil Co., et al, Jackson 2	45	3025
Guernsey Oil Co., McKinney 1	15	3350
HUTCHINSON COUNTY—		
Prairie & Phillips Pet. Co., Johnson 53-A	40	2997

WEST TEXAS

HOWARD COUNTY—		
F-H-E- Co., Roberts 1-D	180	2537
JONES COUNTY—		
Phillips Pet. Co., Pomroy 1	110	2493
PECOS COUNTY—		
The California Co., M. A. Smith 9	2600	1470
M. A. Smith 10	4650	1572
I. G. Yates 12	25000	1290
Mid-Kansas & Transcontinental Yates 10-B	12200	1313
I. G. Yates 20-B	7200	1308
Pandem Oil Corp. & Gibson Oil Corp., River Bed 10	1000	1060
WINKLER COUNTY—		
Humble O&R Co., Hendrick 2-B	1800	3010
Landreth Prod. Corp. & Roxana, Hendrick 3-A	3125	2959
Maxwell & Turman, Hendrick 7	2000	2860
Southern Crude & Westbrook, Hendrick 6-C-T-88	500	3050

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WEST TEXAS

County Maps
Combination Maps

Descriptions and prices on application.

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Wichita Falls, Texas.

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Write for Maps and Information

REFERENCES: Mercantile Agencies and Nat'l Banks of Fort Worth
16 Years in Texas

C. W. WEBSTER
PETROLEUM BUILDING, FORT WORTH, TEXAS

Say you saw it in The OIL WEEKLY

Marland Drilling 10 Wells in New Mexico

Albuquerque, N. M.ex.—Marland Oil Company has officially announced the projected drilling of four wells in the southeastern part of this state, and announced also that six additional locations will be made immediately. This is the first concentrated campaign to be announced by any major operating company in New Mexico.

In its announcement the company stated that all would be deep tests, drilled to 4000 feet or more, and that no other operator would cooperate in their drilling. The locations are sw se 19-26s-37e (now drilling); sw 4-25s-36e; sw 20-23-35e; ne sw 34-23s-31e.

The Marland has 500,000 acres in southeast New Mexico and the ten wells mentioned are the beginning of an active campaign to test these holdings. Headquarters for the operations will be in Carlsbad.

Interest in the southeast Mexico area has increased with the play in southwest Texas. The Yates, Crane and Upton, and Winkler pools of west Texas indicate a trend northwest into New Mexico which seems verified by the Texas Production Company's gas and oil well in 22-26s-37e, Lea County. The general strike of the play seems to be toward the Artesia and Maljamar pools of New Mexico.

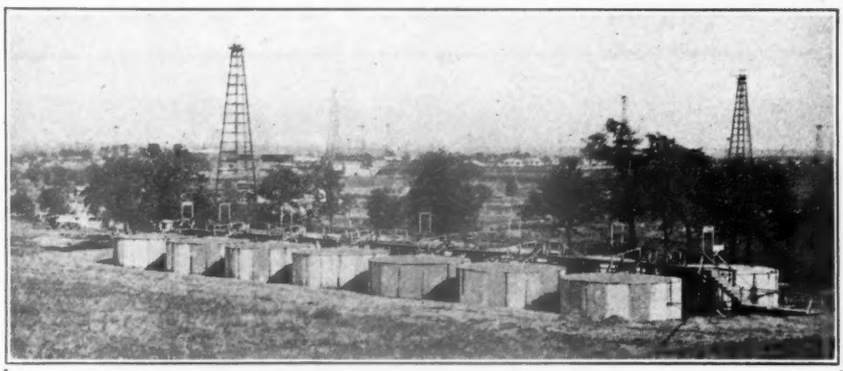
Creek County

Tulsa—Madden, Morgan & Flynn, pioneers of the Davenport, Oklahoma, field, last week made a 250 barrel well in their Sellers 1, in the northeast of the southeast of the southwest of Section 13-15-9, Creek County, topping the Misner sand at 3390 feet and drilled in one foot. The well was flowing at three hour intervals.

In the Manford district of Creek County Roxana Petroleum Corporation's Bartlett 4, in the northwest corner of the northeast Section 18-19-9, flowed 800 barrels February 17 from Wilcox sand at 2856-71 feet. This gauge represented a substantial increase over the initial yield of 615 barrels early in the week.

Plug Teapot Wells

Casper, Wyo.—H. V. Meabon, Casper oil well contractor, has contracted to plug and abandon two wells on Teapot Dome, U. S. Reserve No. 3. The government advertised for bids to plug and abandon these wells and to mud off other wells on the dome, but no bids were received except for plugging and abandoning the two wells. Not having received bids for the mudding-off job, this work will be done under the supervision of representatives of the navy. A crew of former Mammoth Oil Company employees and other oil field workers will be employed.



Fourteen 500-bbl. low type MALONEYS in service at the Anna Burden No. 1 well, of the Carter Oil Company

MALONEYS Pay Dividends In *Longer Service*

Being made of rust-resisting Keystone Copper Steel, the most durable sheet steel, MALONEY Bolted Steel Tanks endure longer. This longer service enjoyed by buyers of MALONEYS is like receiving dividends on one's investment in tankage—for the initial cost is no higher.

MALONEY Tanks are constructed with our patented "crimp" which causes parts to fit accurately. Seams are packed with our special rubber gasket and dressed with our Gaso cement, rendering them vapor-tight, and are reinforced with rigid steel channels. All bolts are of 90,000 pound tensile strength—35% stronger than ordinary bolts. Cleaning out plates are large and set flush with bottoms. Painting is with Maloney Special Pearl Gray paint. Valves and thief-hatches are of the most improved types.

"Alone in Quality"

MALONEY TANK MFG. CO.

TULSA, OKLAHOMA, U. S. A.

Distributors at All Principal Petroleum Points.

Sizes: 12 to 10,000 Barrels.

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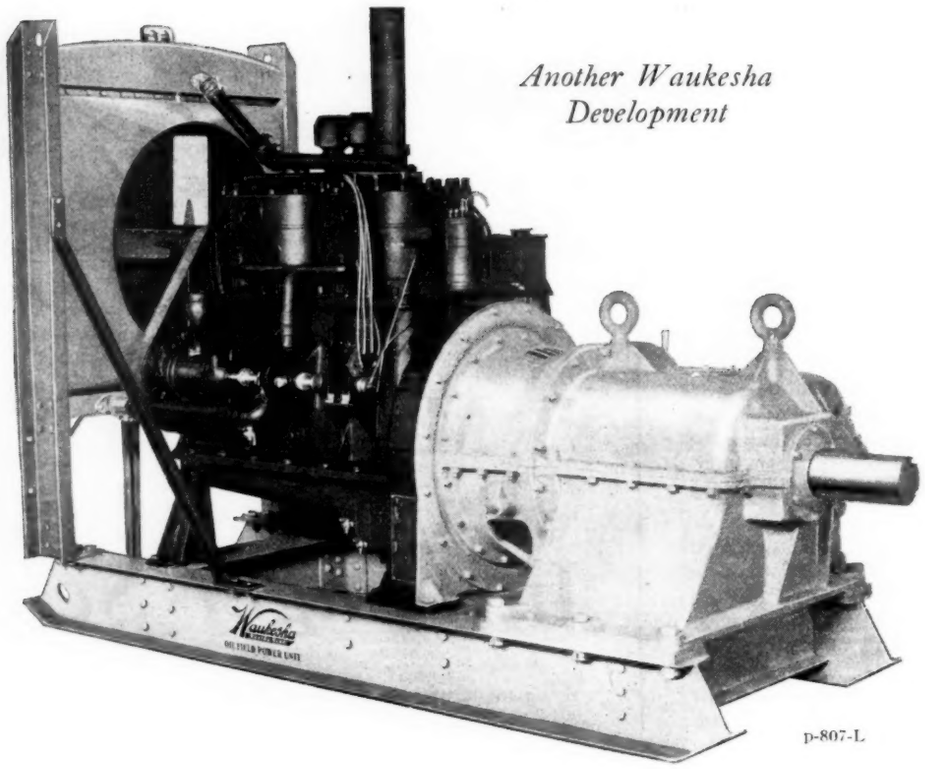
Howell Aluminum "3 in 1" Vacuum Pressure Valve and Thief Hatch
The BEST and LATEST Deck Equipment—POSITIVE Safety



Another Waukesha Development

p-807-L

Setting a New Standard

Waukesha heavy-duty engines and Oil Field Power Units are the standard of comparison with oil production men. This Herringbone Speed Reducer is backed by two years experimental work in the field plus years of close association with the oil industry in supplying gas power units. It sets a new standard in speed reducing gears for oil field work.

These Herringbone Speed Reducers provide several novel features of particular value and interest to production men who are interested in the minimum loss of production time. The ready accessibility of the clutch, the complete yet easily removable shafts and gears due to the horizontal division of the gear box and the use of ball bearings and unusually large shafts will appeal to all practical field men. Write for Bulletin 656 describing this new unit.

P-816-L

OIL INDUSTRY EQUIPMENT DIVISION

WAUKESHA MOTOR COMPANY

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Exclusive Builders of Heavy Duty Gasoline Engines for Over Twenty Years

NEW EQUIPMENT, CATALOGS, BULLETINS, BOOKS

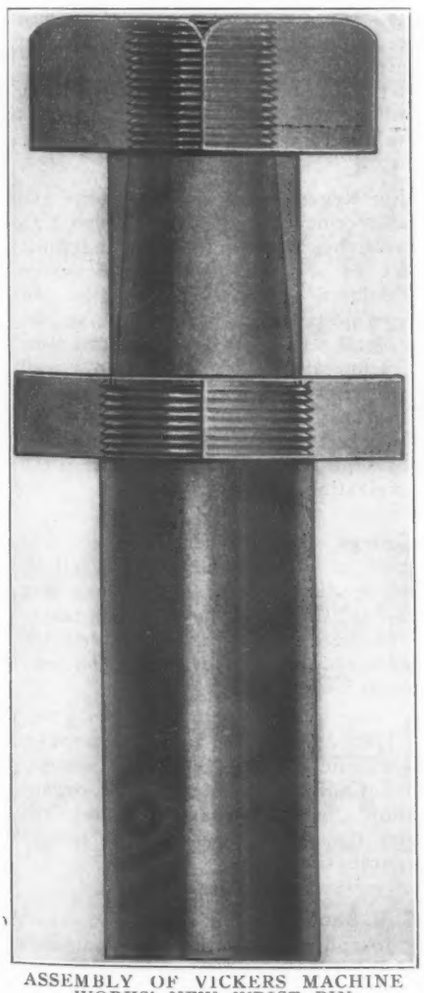
Vickers Wrist Pin

VICKERS MACHINE WORKS

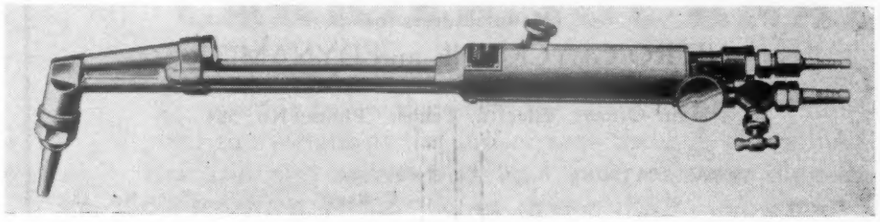
Vickers Machine Works, Smackover, Arkansas, manufacturers and repairers of oil field tools and specialties, announce the perfection of an Improved Adjustable Wrist Pin.

This pin has a tapered shank, over which fits a steel split bushing, tapered in the opposite direction, the two tapers dove tailing and forming a straight shank on the wrist pin, the size of the hole in the crank. It is further equipped with two left hand threaded nuts, one being fitted to the small end of the pin, while the other is fitted to the large part of the pin, on the opposite side of the tapered bushing, the nuts forming the shoulders of the pin, against which the crank will work.

Being thus equipped, the crank, in its continuous working, will have a tendency , as the pin hole wears, to loosen the rear nut, and tighten the end nut, thereby expanding the tapered bushing, and keeping the pin tight in the hole at all times. This pin is especially convenient for use in old worn out holes, the adjustable feature, enabling the user to fit it to most any size or shape hole.



ASSEMBLY OF VICKERS MACHINE WORKS' NEW WRIST PIN



OXWELD BLOW PIPE

The range of adjustment is from 1/32 to 5/32, on each size bushing. However these bushings are made in several different sizes for each size pin, and for that reason the adjustments would not have to be too large.

The large end of the wrist pin is made to fit all sizes of standard Pitman Heads.

More detailed data will be supplied by Vickers Machine Works, Smackover, Arkansas, upon request.

New Simplex Jack

TEMPLETON, KENLY AND COMPANY

A new line of screw jacks with several improvements in design and finish is announced by Templeton, Kenly and Company, Ltd., of Chicago, Illinois.

Instead of the solid frame, the new Simplex screw jacks are built with an open handhole, permitting the screw of the jack to be visible at all times. This informs the operator how high the screw may be run out.

The carrying handle is an ingeniously formed portion of the handhole, being braced and ribbed. The screw and head are forged from one piece of steel. The standard and cap are made of refined gray iron. The base is formed with an extra ribbing providing stability and strength. Duco lacquer or color finish is provided. Each side of the jack is lacquered in a different color.

Thirty-two sizes comprise the line.

Further information will be provided upon application to the company.

New Oxweld Blowpipe

OXWELD ACETYLENE COMPANY

A new cutting blowpipe known as type C-14 has been added to the line of the Oxweld Acetylene Company, 30 East 42nd Street, New York.

This blowpipe uses the same nozzles as the Oxweld type C-2, which it resembles, although several improvements in design have been made. The three gas tubes are straight, having no bends either outside or inside the handle. The cutting valve is of the same design as has been used on the type C-6 for many years.

Some time ago the small needle valve bodies used for acetylene on the cutting blowpipes were improved by making them pressure forgings. Now in addition to these, both the head and the rear body of the type C-14 are also pressure forgings, instead of castings, giving better appearance, increased durability and lessened weight.

Interchangeable nozzles are provided so that the blowpipe may be used with either medium or low pressure. To accomplish this, the regulator should be adjusted to give a flame showing an excess acetylene cone not more than one-inch long when the acetylene valve on the blowpipe is wide open. The acetylene valve should then be adjusted to obtain the neutral flame.

Additional data can be had from the manufacturers on request.

NEW SIMPLEX JACK

United States Torpedo Company

Manufacturers of

NITRO GLYCERINE and DYNAMITE

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8—6″ used Standard Rigs	4—45 H P used Boilers
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1—25 H P used Oil Engine	60,000 ft. 3″ used line pipe
1—35 H P used Oil Engine	Used Casing 4¾″ to 15½″ Inc.
8—12x12 used Steam Engines	Used Line Pipe 2″ to 8″ Inc.

We buy abandoned pipe lines and oil wells. If you have any to sell, communicate with us before you dispose of them.

BRANCH STORES
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HARRY R. BOURNE

Who recently joined the staff of the Hercules Motors Corporation, Canton, Ohio, to concentrate on sales of engines to the oil industry.

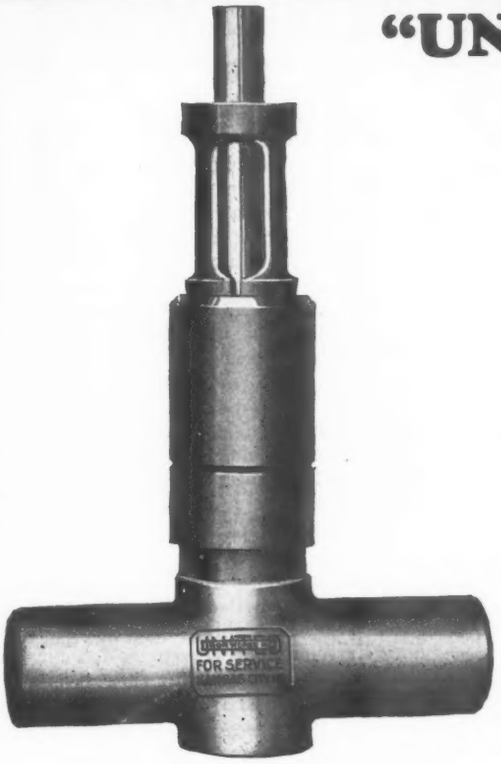
E. F. Goggins of the Dunn Manufacturing Company, Oxnard, California, leaves next week to accompany A. V. "Ace" Bland on a tour of the Gulf Coast and Arkansas fields. Mr. Goggins is planning to drive overland to meet Mr. Bland, who recently joined the Dunn organization as Gulf Coast representative. Mr. Goggins will be away from California territory some months, and will cover Mr. Bland's new territory with him.

Jim Regan, of the Regan Forge and Engineering Company, San Pedro, California, has been granted an indefinite leave of absence, following a severe breakdown. For several months Mr. Regan's health has been failing and he has been retired to devote all his time to recuperating. He will go to a well known hot springs health resort, in Southern California. His duties as an officer of the company will de handled by Joseph Regan and others within the organization.

George H. Parker will be in charge of the Oxford and Winfield, Kansas, district for Parkersburg Rig and Reel Company, having been transferred there recently from the Bristow, Oklahoma, branch, of which he was manager.

The Associated Supply Company, 724 Pacific Electric Building, Los Angeles, California, announces the organization of a purchasing department under the supervision of S. A. Joseph as purchasing agent.

S. R. Shoup, general sales manager of the Joseph Reid Gas Engine Company, of Oil City, Pennsylvania, has returned to Los Angeles, after an extended visit to the plant in Oil City.



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Gasoline	Pale Oils	Machine Oils	Waxes
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Bunker Oils	Spindle Oils	Cup Greases	Pipe Coating
Signal Oils	Motor Oils	Gear Lubricants	Roofing
Miners Oil	Engine Oils	Axle Greases	Roofing Cement
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Saves thousands of dollars every year in time, money, labor and oil

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Saves enough oil, usually wasted on wet jobs, to quickly return its cost.

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Insures a clean, dry job, and safety for the crew.

Try At Our Risk

Any size desired will be shipped prepaid for trial. If it fails, return it to us at our expense. No questions asked.

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SQUEAKS FROM THE BULL WHEEL

Country Policeman: (at scene of murder): "You can't come in here."

Reporter: "But I've been sent to do the murder."

"Well, you're too late; the murder's been done."

Curious: Why do they call sail boats "she"?

Cautious: Because they make a better showing in the wind.

He—The first time you contradict me, I'm going to kiss you.

She—You are NOT.

I have found a good way to make an Englishman laugh in his old age.

How?

Tell him jokes when he is a boy.

There is nothing greasier than grease.

Have you ever used a butcher's telephone?

The picnickers were forced to cross the railroad tracks. Little Don ran ahead and saw a train approaching. Eagerly he called to his father, still on the track: "Hurry, daddy, or else throw me that lunch."—Magnolia Oil News.

"Aha, Sandy! Did I no see ye last night wi' bo' arms aboot a lassie?"

"Na, Jamie, it couldna been me. I always keep ane hand i' ma pocket."

"I have always had a presentiment," she said, "that I should die young."

"Well, dearie," remarked her woman friend, "you didn't after all, did you?"

Down in one of the southern states recently, a colored man and his wife were haled into court on a charge of disturbing the peace. "Rastus," said the magistrate, addressing the husband, "you are accused of disturbing your entire neighborhood on Tuesday night. What have you got to say for yourself?" "It was this way, Jedge," explained Rastus, glancing first at the magistrate and then at his wife. "Me an' Lucy got into an ahgument obah de coin she got fo' a week's wash. She call me a lazy loafah, an' I clap her down flat. Up she hop, an' smash a skillet on my haid, an' draps me flat. Den up I riz an dwelt her with a chaih leg, an' den she flang a tea kittle at me, which scald quite consid'able." "I see," commented the magistrate to Rastus. "And then what happened?" "An' den, Jedge," answered Rastus with great seriousness, "both lost our temper a little, and so naturally we bergun to fight."—Pure Oil News.

Donald, the story goes, was one of the pillars of the village inn. Well, after he had gone home one night the landlord of the inn discovered, to his great horror, that he had poured Donald's last drink out of the bottle of sulphuric acid which was used for cleaning the faucets. Every moment he expected to hear of Donald's death, and his relief was great when the old fellow arrived next night bright and fresh.

"Donald, what did you think of the whiskey you got last night?" he asked.

"It was a fine dram, a guid warmin' dram," said Donald, "but it hade one fault—every time I coughed it set fire to me whiskers!"

An old Scotchman slipped on the pavement and rolled under a steam roller. The last thing he did before being flattened out was to roll on his side. He figured he might as well have his trousers pressed for the funeral.

A recent college graduate applied in the local butcher shop for a job. The butcher looked him over carefully and then said: "We need an energetic young man to run the slicing machine. Have you ever had any experience?"

"I used to play golf."

I am writing a paper on calendar reform for our club. Do you know which Pope gave us our present calendar?

Pope? Good heavens! I thought it came from our grocer.

"When I came to New York I had only a dollar in my pocket. With that small amount I made my start."

"What did you do with the dollar?"

"Wired home for more."

"And what was Sandy's gift to the young married couple?"

"He presented them with a pair of homing pigeons."

"Your ticket," said the conductor to the slightly befuddled passenger, "is for Decatur, and this train is on the St. Louis line."

"Goodn'ss grashus!" said the passenger, dosh th' eng'neer know he'sh on wrong railroad?"

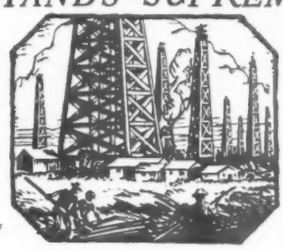
"Any speed traps around here?"

Village Constable—"Nope. Not any more. Catchin' boot-leggers pays better. "

Mrs. Witsend (from stairway)—Wilbur, for mercy's sake turn off that radio. That woman has the awfulest voice I ever heard.

Wilbur—Ha! Ha! That isn't the radio, ma. This is Mrs. Highpitch come to call.—Life.

ASCO STEEL
STANDS SUPREME



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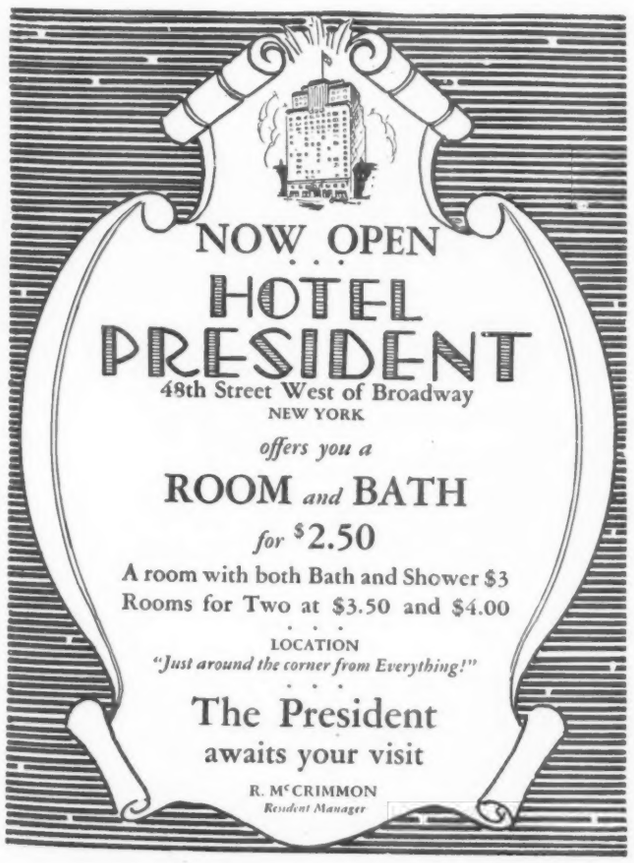
WICKWIRE SPENCER UNIFORM WIRE ROPE
tests better than A. P. I. specifications



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Lukens Steel Company, New Orleans, La.

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PARAFFINE WAX
PETROLEUM COKE
FUEL OIL
LUBRICATING OILS
CYLINDER
ENGINE
CORDAGE

Red and Pale Paraffine Oils

General Sales Offices: PITTSBURGH, PA.

District Sales Offices:
NEW YORK, HOUSTON, ATLANTA, BOSTON, NEW ORLEANS, PHILADELPHIA, LOUISVILLE

Ocean Terminals:

Boston (Beverly), Mass.
Providence, R. I.
New York Harbor (Bayonne, N.J.)
Jacksonville, Fla.
Port Tampa, Fla.
Mobile (Magazine Point, Ala.)
Philadelphia (Girard Point, Pa.)
Charleston, S. C.
Savannah, Ga.
New Orleans (Gretna, La.)
Port Arthur, Texas
Galveston, Texas